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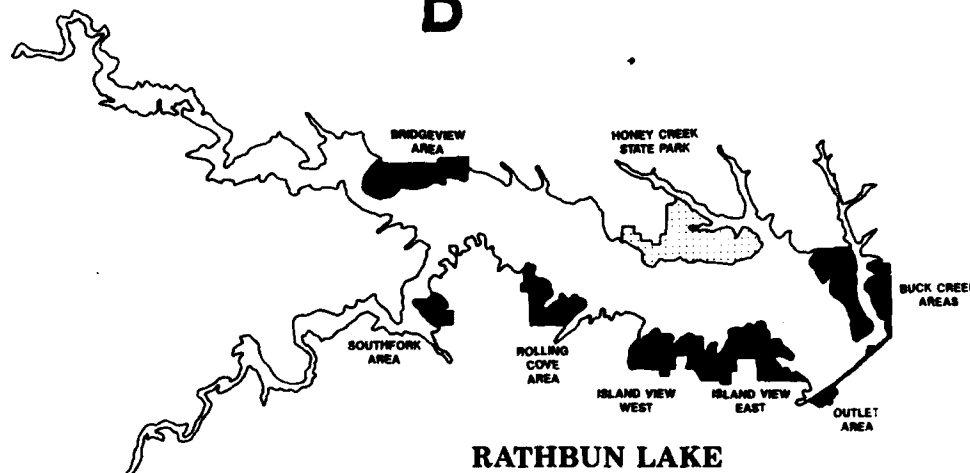
Subsistence and Settlement at Rathbun Reservoir Area in South Central Iowa

Contract No.: DACW41-79-C-0069

By:
L. E. Bradley

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SUBSISTENCE AND SETTLEMENT AT RATHBUN
RESERVOIR AREA IN SOUTH CENTRAL IOWA

by

L.E. Bradley
University of South Dakota
Archaeology Laboratory



Submitted to:
The Department of the Army
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ABSTRACT

During the summer of 1979, personnel from the Archaeology Laboratory at the University of South Dakota conducted archaeological investigations in the Rathbun Reservoir area in south central Iowa. Approximately 155 miles of shoreline were surveyed and artifacts were recorded at 104 beach locations. Only eight of the findspots were deemed of sufficient size and density to warrant assigning site numbers. Testing conducted at the most prolific of the shoreline locations revealed no subsurface material below the immediate surface of the ground.

Testing was conducted at 31 previously recorded sites to allow their evaluation for nomination to the National Register of Historic Places. With the exception of a single site which produced minimal amounts of chipping debris from the upper 30 cm of tests, no subsurface materials were recovered from the sites tested.

A 30 percent survey of eight public use areas yielded no new information concerning the location of upland and hill slope sites. However, isolated materials were noted along the shorelines of most of the public use areas surveyed in 1979.

Due to the lack of subsurface material from the reservoir area, the settlement / subsistence model proposed in a research design for the project could not be evaluated. It is possible, however, to operationalize a part of the model using the shoreline findspot data. Results indicate the location of larger sites in areas of environmental diversity with hunting activities along the edges of the valleys in areas of less ecological diversity. Although the sample of specimens is small, projectile points are generally not found in quantity in the areas where Woodland mortuary sites appear. This suggests that cultural rather than environmental factors may play a larger role in site selection than was predicted by the model.

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INTRODUCTION

Rathbun Reservoir is one of Iowa's larger reservoir areas and has been in operation since 1971 when it was dedicated. The reservoir has a surface area of 11000 acres when normal pool level is maintained at 904 MSL. When water levels are raised to that of the flood pool the surface area of the lake nearly doubles. In times of high water, the reservoir extends nearly 21 miles up the north and south forks of the Chariton valley from the dam site.

The reservoir impounds the waters of the Chariton River in the southern tier of counties of south Central Iowa. The Chariton River flows generally southeastward through the western third of Iowa, then changes course 25 miles north of the Missouri border to flow eastward for fifty miles before continuing its southward flow. The Rathbun Reservoir dam has been constructed at a point where the river resumes its southeastward flow. The main body and both forks of the reservoir are situated primarily in the southwestern part of Appanoose County, although small parts of the lake extend into Monroe, Lucas, and Wayne Counties, Iowa.

Rathbun Reservoir is situated in the Southern Iowa Drift Plain, the most representative Iowa landscape and the largest of Iowa's landform regions. The physiography of the area is characterized by moderate to thick loess cover, weathered glacial drift, and dissected topography with bedrock exposures in major stream valleys. The topography of the Chariton drainage is characterized by extreme variation in relief. Elevations in the pre-reservoir Chariton drainage varied up to 120 ft between the valley floor and uplands (Prior 1976:23-6).

During the summer of 1979, personnel from the University of South Dakota Archaeology Laboratory conducted investigations in the Rathbun Reservoir area. The investigations were funded through a contractual agreement, DACW41-079-C-0069, between the University of South Dakota and the Corps of Engineers, Kansas City District. The Scope of Work for the 1979 archaeological project in Rathbun Reservoir called for three areas of investigation: 1) an intensive survey of the lake shoreline from the dam site to the Lucas-Monroe county line, 2) a 30 percent survey of each of eight public use areas in the reservoir area, and 3) testing of 31 previously reported sites to determine their subsurface character and eligibility for the National Register of Historic places.

RESEARCH DESIGN

SCOPE OF WORK:

An intensive shoreline survey was conducted along the beaches of Rathbun Lake between the elevations of 902 M.S.L. and 913 M.S.L. The purpose of the intensive shoreline reconnaissance was to determine if archaeological sites, other than those which had been previously reported, existed in the approximately 2525 acre area bounded by the two contour intervals.

The survey and testing at Rathbun Reservoir provide data which allows the construction of models and accompanying hypotheses concerning settlement/subsistence systems within a single river valley. Prior to the actual testing of the 31 previously reported sites in the reservoir, it was hoped that the shoreline reconnaissance would provide independent data to be used to test models or hypotheses generated as site testing progressed.

An imperative of the Rathbun Reservoir investigations is the establishment of a culture history for the local area; virtually all other aspects of the project are contingent on more thoroughly delineating the prehistoric chronology of the watershed. The gross chronological information published for the region by Grantham (nd) suggests occupation in the area from 8000 years ago down to historic times. However, the culture history of the area is presently poorly understood with cultural affiliations of nearly three - quarters of the sites in the area in question. Of the 31 sites scheduled for testing as part of the 1979 investigations, 23 are of questionable cultural affiliations. Seventy percent, or 50 of the 80 previously reported archaeological sites in the reservoir area are of uncertain affiliation (Wheeler 1949, 1959; McKusick and Ries 1962; Hoffman 1965; Weichman 1976a, 1976b). Once established, a chronology developed for tested sites might then be generalized to include other sites where diagnostic materials are lacking.

Stylistic analyses of lithic and ceramic materials in conjunction with absolute dating methods can provide dates for sites lacking diagnostic materials. At some sites, especially those where stylistically undiagnostic lithic materials have been recovered, the possibility exists that sophisticated analyses like those employed by European specialists can be utilized to determine temporal variation of flaking techniques between sites of known and unknown cultural affiliation (Montet-White 1973 and Bradley 1979). Patterns of artifact deposition within particular resource zones may also offer clues to affiliation. Topographic placement of sites may play a role in the identification of cultural affiliation of sites. One obvious example of the differential usage of resource zones and topography is provided by the presence of Woodland mortuary sites on bluffs and habitation sites on terraces in river valleys (Hoffman 1965).

After temporally ordering sites, a typology of sites can be established based on the nature of the materials recovered and the physiographic location of each. It is possible through the use of analogy to reduce subsistence activities to their suggested corresponding tool assemblages. One example of such a reduction is that by Thomas (1973) in his study of Great Basin Shoshonean materials in the Reese River Valley of Nevada. However, it is recognized that the ecological situation in Nevada where Thomas worked is likely quite different from the prehistoric conditions which existed in Central Iowa. The cultural level of generalized hunting/ gathering bands aggregates can be expected to differ little for the two areas during the Archaic and parts of the Woodland period and its equivalent in Nevada.

Thomas' classification of site activity types is of use as a working model for the construction of assemblage typologies for archaeological data from Rathbun reservoir (1973:162). Each assemblage recovered from sites during the survey or from a level of a tested site may be thought of as the representation of a single activity or a combination of activities. Specific tool types are considered to correlate with specific activities, although it is recognized that some tool types, such as knives, may serve in a variety of different functions.

ASSEMBLAGE AND SITE CATEGORIES

Hunting Assemblage:

This assemblage is expected to consist predominately of projectile points. Points are expected to have converging lateral margins, to be of light weight, and to exhibit bases modified for hafting. Edge angles of projectile points are expected to be less than 25 degrees.

Butchering Assemblage:

Working edges of prehistoric tools used for processing animal carcasses can be subdivided into functional categories based on analogy with modern hunters and gatherers. Edges averaging less than 45 degrees are expected to be associated with skinning and cutting activities while those between 45 and 60 degrees are best suited for fiber shredding, for hide scraping, and for cutting harder substances such as wood, bone, and horn. Lithic tools with edge angles greater than 60 degrees have a suggested function of working wood, bone, or heavy fiber.

Habitation Group Assemblage:

Artifacts in this group comprise several sub-assemblage types:

DWELLINGS: Daub, storage pits, postmoulds or other structural debris would be expected for these locations. Indirect evidence in the form of bounded accumulations of debris also could serve as indicators of sites which could be placed in this category.

FOOD PREPARATION AND PRESERVATION: These activities would leave evidence in the form of pottery, knives, grinding stones and faunal remains.

TOOL MANUFACTURE AND REPAIR (MAINTENANCE): Artifacts appearing in these assemblages could include spokeshaves, shaft straighteners, and gravers used in atlatl, spear, and bow and arrow manufacture and maintenance. Considerable lithic waste resulting from lithic reduction processes and broken artifacts, especially projectile point bases, should be encountered at sites in this category.

CLOTHING MANUFACTURE AND REPAIR: The presence of scraping tools and piercing tools would be expected for assemblages in this category.

Mortuary Complex Sites:

Although no easily identifiable assemblage has been found in association with mortuary sites at Rathbun Reservoir, features such as mounds, human skeletal materials, and grave goods constitute such evidence. Actual excavation of mortuary complex sites, however, is and has been for the past decade, controversial. The topic is an emotional issue which is presently a subject of heated debate among archaeologists. The State Archaeologist of Iowa has the primary responsibility for investigating and preserving ancient burials in the state and presently does not recommend exploratory excavations in mounds unless extenuating circumstances involving their preservation are involved (Duane Anderson personal communication).

Mounds and other burial sites in Iowa are legally protected in Iowa as the result of specific legislation. Iowa Code states that:

714.21 VIOLATING SEPULCHER. If any person, without lawful authority, willfully dig up, disinter, remove, or carry away any human body, or the remains thereof, including ancient human remains as defined in section six (6) of this Act, from its place of interment; or aid, assist, encourage, incite, or procure the same to be done or attempted; or willfully receive, conceal, or dispose of any such human body or the remains thereof; or if any person with the intent to commit any of the aforesaid acts, partially perform the same, the person shall be imprisoned in the penitentiary not more than two years, or be fined not exceeding twenty-five hundred dollars, or both (Anderson, et. al., 1978).

As well, members of the Indian community "will not tolerate research projects which involve digging into burial grounds that are in a good state of preservation (Anderson, et. al. .., 1978). Given the present legal and political climate surrounding ancient burials in Iowa, the data which may be collected from mortuary sites is limited to visible surface features and excavations outside burial mounds. The presence of mounds in the absence of specific data concerning their contents, can still provide valuable data for the reconstruction of cultural activities in the past. The presence of non mortuary sites is also expected to correlate with physiography.

While Thomas (1973) was fortunate enough to have firm ethnographic evidence on which to base his site types and distributional assumptions, such data does not exist for the Rathbun reservoir area. Instead, certain assumptions must be made concerning the distribution of assemblage types. For example, hunting equipment, such as projectile points, can be expected to appear as isolated finds throughout the reservoir area. It is expected that hunting assemblages will be found in areas providing access to water, grassland, and browse. Intensive foraging activities will be represented in small bounded areas of extreme biotic diversity. Sites where horticulture was practiced will be near arable land and the occupants can be expected to also have utilized areas of biotic diversity (Judge 1971).

More permanent habitation sites can be expected to be defined on the basis of combinations of assemblage types reflecting the wider range of activities which took place there and may be definable on the basis of absolute quantities of artifacts alone. Artifact density, then, in conjunction with wide assemblage variation, may aid in the identification of such occupations.

The use of an "assemblage" model for the analysis of remains from tested sites can aid in the delineation of more specific site function. This approach can be especially effective for sites

which consist predominantly of lithic waste. These sites can be considered as parts of the Habitation Group assemblages and are expected to appear near or within habitation areas. However, it is recognized that flake scatters may be the work of only one or two individuals and may be the direct result of quarrying or resharpening activities or may be examples of secondary deposition and removal by the original inhabitants (Behn 1983). Such sites may aid greatly, our understanding of group demography and site function. Hypotheses and methods, however, are often changed in the field. As suggested by Raab (1977), research designs with multiple strategies are imperative for efficiency in the field.

The quality of the collected data always determines the suitability of statistical procedures which may be used to answer hypothesized questions concerning relationships and data structure. Techniques which have proved useful for archaeological data include principal components (Hodson 1969), factor analysis (Binford and Binford 1969), k-means analysis (Johnson and Johnson 1975), discriminant function analysis (Seaman 1977), and multiple regression analysis (Bradley 1977, 1979) are applicable for medium to large sized data sets. When quantities of data are limited, however, descriptive statistical routines or univariate procedures can be utilized.

The procedures outlined above can contribute several sets of additional data:

1. Data sufficient to assess significance of previously recorded and newly discovered sites and their eligibility to the National Register of Historic Places.
2. Data to allow for the establishment of relationships between disturbed surface material and undisturbed subsurface deposits. It should be noted, however, that attempts at establishing such relationships in the past have produced ambiguous results (Binford, et al. 1970; Redman and Watson 1970; Tolstoy and Fish 1973; Winter 1976).

CULTURE HISTORY OF THE AREA

The following brief generalized prehistory of southern Iowa is based primarily on Alex (1980) and D. Anderson (1981).

The prehistoric sequence of the south central Iowa area is similar to that defined for surrounding states. The archeological record begins at least 15000 years ago, or perhaps earlier, in both Iowa and neighboring areas. Other cultures, which lasted until approximately 1000 years ago are usually identified by the presence of a complex of characteristics, the most important of which is distinctive chipped stone projectile point styles. Cultures appearing in Iowa after approximately 1000 years ago are identified primarily on the basis of ceramic styles, although lithic assemblages still continue to express enough variability to allow for the identification of some specific cultures.

The prehistory of Iowa may be divided into a series of periods which are roughly equivalent to economic stages. Technological change is mirrored in the archeological record, which in turn reflects different economic adaptations. An overall scheme of cultural periods identified for south central Iowa is described below and includes sites recorded in the reservoir area.

PALEO-INDIAN PERIOD (15,000 to 8000 years ago):

This culture is one of the earliest defined for Iowa, although it is possible that evidence for earlier, less well-defined cultures are present and are not easily identified. The Paleo-Indian period is one characterized by economic activities directed at big-game hunting. Three stages have been defined for this period in the southwestern parts of North America; Llano, Folsom, and Plano. Each of the three substages is characterized by nomadic hunting and gathering, the use of lanceolate projectile points, and at least a partial reliance on big-game hunting.

Llano culture is the earliest of the Paleo-Indian period and is associated with the hunting of mammoth with projectiles tipped with Clovis points. Pleistocene megafauna such as mammoth, camel, giant bison and other large herbivores has been found in association with Clovis-like points and other tools in most other areas of North America. Clovis fluted points are one of the most easily identified characteristics of early Paleo-Indian sites. Although numerous other types of stone and bone tools are also present in early assemblages, these materials have a much wider temporal distribution and may be indicative of later occupations as well.

Folsom remains are often identified by the presence of small fluted projectile points thinner and smaller than those of Clovis. Sites of the Folsom complex are often found in

association with extinct bison in the context of kill sites. Characteristic Llano stone tools, such as scrapers, retouched flakes, and other chipped stone tools which occur in Clovis deposits continued to be manufactured during Folsom times.

Plano culture is identified by the presence of one or several of a diverse collection of somewhat different projectile point styles. The point forms are often characterized by distinctive pressure flaking scars running perpendicular to the point's lateral margins. A variety of point forms such as Agate Basin, Hell Gap, Meserve, Dalton, Duncan, and many other projectile point types are associated with Plano culture assemblages. In Iowa, the lower levels of the Cherokee Sewer site has produced Agate Basin-like projectile points associated with a form of modern bison and dated to about 8600 years ago (Anderson and Schutler 1979). Other Plano materials have appeared at surface sites in the area.

There is little data from the Chariton River valley to suggest an occupation by Paleo-Indian peoples. Only two sites in the reservoir area have been identified as Paleo-Indian occupations. Each has produced projectile point forms thought to be indicative of early occupations. Unfortunately, nothing remains of either site from which additional data may be gathered. One of these, y13AN62 (Speers 1967), is inundated and the location of the other, 13AN3, has never been verified. The cultural affiliation of the latter was based on a landowner's report of finding an early-looking point which had since been misplaced (Hansen and Ries 1962).

ARCHAIC PERIOD (8000 to 2800 years ago):

Archaic period occupations reflect a more regionally oriented economy which often reflects diversity in economic pursuits. At some Archaic period deposits, such as at the Cherokee Sewer site in northwestern Iowa (Anderson and Schutler 1979), there is evidence for bison hunting. However, more diverse resource utilization characterizes this period. The economic importance of shellfish, fish, and small mammals and plant foods such as grass seeds and nuts increases. As during earlier periods, semi-nomadic hunting and gathering is the dominant way of life, but the Archaic lacks the widespread economic uniformity of earlier periods. Archaic occupations are identified on the basis of distinctive projectile point styles; a series of notched, stemmed, and lanceolate projectile points, often with ground bases are associated with Archaic cultures. The only Archaic occupation firmly identified in the reservoir area is 13AN52 (Weichman 1976a, Benn and Hovde 1979).

WOODLAND PERIOD (2800 to 1200 years ago):

Woodland cultures in Iowa are identified by three main characteristics which may occur in combination or singly. These

Woodland characteristics include the presence of pottery, burial mounds, or cultigens such as corn, beans, or squash. Woodland projectile points appear in such a diverse series of forms, that ceramics become more important than lithics for the identification of the cultural affiliation of assemblages. Three major divisions have been defined for the Woodland in Iowa: Early Woodland which includes Marion Thick, Black Sands, and Havana pottery; Middle Woodland with Hopewellian materials; and Late Woodland at about AD 500 when effigy mounds appear. Although Early and Middle Woodland lithic technology differs little from that of the earlier Archaic, the bow appears during Late Woodland times, making possible new hunting techniques.

Specific mortuary sites in the reservoir area which have been associated with Woodland occupations are The Rosencrantz Mound Group, 13AN1, (Wheeler 1949); 13AN9 (Hoffman 1965); The Milledgeville Mound Group, 13AN16 (McKusick and Ries 1962); The McAninch Mound Group, 13AN10, (Brown 1967); The Hawk Mound Group, 13AN207, (Hoffman 1965); and The Overturf Mounds, 13AN208, (Hoffman 1965). Habitation sites with Woodland affiliations are usually based on ceramic identifications. Sites such as 13AN5 through 13AN9 (McKusick and Ries 1962), 13AN18 (McKusick and Ries), 13AN44 (Weichman 1976b), 13AN47, 13AN49, and 13AN51 (Weichman 1976a), 13AN204 (Hoffman 1965), and 13LC1, 13LC9, and 13WE6 (Hoffman 1965) are identified as Woodland occupations.

LATE PREHISTORIC PERIOD (1200 years ago to AD 1700):

The Late Prehistoric period in Iowa is characterized by the presence of a series of cultures which share some features, but are each distinct in terms of material culture.

Between the terminus of Woodland culture and AD 1250, there are three distinctive cultures which appear in western Iowa: Glenwood, Mill Creek, and Great Oasis. Sites of each of these three cultures appear along watercourses and have produced evidence of substantial living structures which, in some instances, suggests long-term occupation in specific areas. Where Woodland ceramics share characteristics over wide-spread areas, spatial variation in ceramics is common during the Late Prehistoric period. Relationships between Late Prehistoric occupations are based on stylistic similarities of ceramics. Glenwood has affinities to the west with other central Plains cultures, Mill Creek ceramics show similarities with Mississippian materials to the East, and Great Oasis with Plains Village tradition cultures. The bow and arrow was used for hunting, but Woodland-style points continued to be made.

Oneota cultures appear over most of Iowa. Although there is little structural evidence in Iowa, sites of this culture may occupy areas of up to 100 acres or more. Oneota is more elaborate than previous archeological cultures but extreme

ceramics variation is the only common characteristic. Shell tempering and trailed design elements are other common characteristics of Oneota ceramics. Economic activities of Oneota peoples were divided equally between hunting and horticulture.

Although small triangular projectile points indicative of Late Prehistoric cultures have been recovered from the shoreline of Rathbun reservoir during the 1979 investigations, there is little else to suggest late occupations in the area.

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

Archaeological investigations in the Rathbun Reservoir area have been conducted over the past four decades and include all phases of research from planning and survey to site excavation. The first reconnaissance of the then proposed reservoir area was in 1948 by Richard Wheeler (1949). Since that time other survey and testing projects in the reservoir area have been conducted by McKusick and Ries (1962), Hoffman (1965), Brown (1967), Weichman (1976a; 1976b) and Benn and Hovde (1979).

The original survey of the area from the proposed dam site to a point nine miles upstream was conducted by R. P. Wheeler who recorded 13AN1, the Rosencrantz mound group, and who noted other locations where artifacts had been found by local collectors and informants (Wheeler 1949).

The next survey of the reservoir area was that by McKusick and Ries (1962) who surveyed much of the reservoir area and who discussed site locations with local informants. In all, 59 sites were reported in the Rathbun Reservoir area during this project.

Hoffman conducted testing and survey for the Smithsonian Institution River Basin Surveys (RBS) in the redefined Rathbun Reservoir area in 1964 (Hoffman 1965). Seven previously unknown sites were reported and several sites were tested at that time. Many of the previously recorded sites in the area were revisited and collections were made.

Lionel Brown also conducted testing in the reservoir area the following year for the RBS. Brown's (1967) work in the reservoir area was largely a follow-up of recommendations made by Hoffman. A series of mound groups and five habitation sites were tested by the RBS crew.

Weichman (1976a; 1976b) also surveyed the reservoir area and reported 13 previously unrecorded sites.

Grantham (nd) developed a management plan for the cultural resources in the reservoir for the Corps of Engineers, Kansas City District. Grantham summarized all previous archeological fieldwork in the reservoir area and made recommendations as to future survey and testing in the area. The 1979 fieldwork conducted by the University of South Dakota Archaeology Laboratory reported herein was based on recommendations made by Grantham.

During the Fall of 1978, David Benn and a field crew from Luther College, Decorah, Iowa, (Benn and Hovde 1979) tested site 13AN52 near the Rathbun Reservoir dam and reported that the site had been destroyed.

Archeological investigations in the Rathbun Reservoir area have either concentrated on different areas of the lake or have concentrated on research at specific sites. The overall appearance of the past research in the reservoir area is that it has lacked a systematic orientation and unified approach. Since past archeological investigations in Rathbun Reservoir concentrated on areas of the reservoir which are presently inundated, the focus of the 1979 investigation was to be on areas which were thought to be most affected by shoreline erosion or planned development.

Of primary importance to the 1979 investigations was the evaluation of the condition of archeological resources which might be present in the impacted areas. Toward this end, fieldwork in 1979 was directed at three areas: 1) an intensive archeological survey of the Rathbun Lake shoreline from the dam to the Lucas-Monroe county line, 2) a 30 percent survey of 8 public use areas in the reservoir area, and 3) testing of 31 previously recorded sites to determine their subsurface character and horizontal extent. Fieldwork was begun in May of 1979 and ended in August of that year.

ENVIRONMENTAL SETTING

Native vegetation of Appanoose County was primarily grassland at the time of White settlement with trees restricted to narrow strips adjoining watercourses. Upland trees were primarily hardwoods such as oak, hickory, and ash, while those in the lowland were cottonwood, walnut, soft maple, and green ash. Farming activities have resulted in the destruction of much of the original forest cover in the area as trees were cleared for pasture or for crops. Presently, most of the tree cover in the county is on steep slopes on the borders of stream valleys (Prior 1976). Wildlife in the area included beaver, coyote, badger, bobcat, rabbit, raccoon, opossum, and white-tailed deer. Birds in the area included herons, owls, and hawks as well as migratory waterfowl. Fishes and reptiles were also available as food resources for the prehistoric populations in the area (Iowa Conservation Commission 1972). The climate of the area is characterized by variable temperatures which may vary from 27 degrees below zero to over 110 degrees F based on observations over the past four decades. Annual rainfall for Appanoose County ranges from 33.3 inches in the northwest to 34.2 inches in the southeast. Average annual snowfall in the reservoir area is 27 inches which falls between December and April. The average first and last killing frost are October 12 and April 28 (Waite 1977).

OVERVIEW OF THE 1979 INVESTIGATIONS

A program of extensive subsurface testing conducted at the 31 previously recorded sites in the reservoir area failed to produce evidence of cultural materials below the immediate surface of the ground. Only at 13AN1 was a limited amount of material defined in a subsurface context. Many of those sites which had been reported previously were difficult or impossible to relocate in 1979 as had been the case over a decade earlier (Hoffman 1965) when a River Basin Surveys crew experienced the same difficulty. Since surface indications of some of the sites such as 13AN9 were not evident in 1979, testing was frequently conducted at locations rather than at specific sites marked by surface scatters of artifacts. The general impression of prehistoric sites in Rathbun Reservoir area is one of thin, easily eroded scatters of lithic waste which in very few instances are accompanied by less than a half dozen small weathered ceramic fragments. When lithic tools were recovered from the shoreline of the reservoir less than one third of them were complete or unbroken specimens. The remainder were fragments.

The 30 percent survey of eight public use areas in the reservoir area yielded no additional evidence of prehistoric occupations. When in frustration, the sampled area was increased up to 100 percent the results were not substantially different. The only indications of prehistoric occupation from Rathbun public use areas were the findspots recorded along shorelines. Most of the

shoreline findspots recorded within the boundaries of public use areas are small scatters of flakes with only a single exception.

The shoreline survey results during 1979 produced evidence of 104 discrete locations where artifacts were found. Of these, only eight produced materials in quantities large enough to warrant the assignment of site numbers registered with the Iowa Historical Preservation Officer. The remaining locations are treated as 'findspots' since most of them consist of fewer than 25 chippage fragments and one or two bifacially flaked artifacts if any. Once the materials were collected at findspots, it is not certain if any trace of the cultural activities which took place there remain.

Although many of the findspots produced artifacts in small quantities the use of even the lowest level of statistical procedures was not warranted. Therefore, computerized distribution patterns for materials were utilized to allow for the definition of settlement patterns. The pattern suggested by plots of findspot and site locations shows that larger sites occur near the juncture of stream valleys in areas where valleys narrow.

Mortuary sites are found to be located away from these areas on the bluffs overlooking broad valley floors. Hunting and butchering sites appear at the edges of narrow valleys.

The discussion to follow will present the results first of the testing of the 31 previously recorded sites, then the results of both the shoreline and public use area surveys. The analysis of archaeological data from the reservoir area which was collected during 1979 follows the presentation of the testing and survey results. Recommendations for future investigations are presented with the results of each phase of the investigations.

PART I.
TESTING OF PREVIOUSLY RECORDED SITES

SITE TESTING

Thirty-one previously recorded sites were scheduled for testing during the 1979 investigations in the reservoir area. The purpose of the tests was to establish the character of each deposit to allow determination of eligibility for nomination to the National register of Historic Places. Only six of the sites are located on or near the shoreline, while the remaining 25 are located on bluffs and hill slopes.

Sites to be tested included five mortuary sites with mounds and 26 habitation sites located on hill slopes or valley edges. Although six of the sites to be tested were reported to be located along the shoreline of the reservoir, three of the sites, 13AN16, 13AN20, and 13AN28 could not be tested since they are at elevations which are in inundated parts of the reservoir.

After testing was concluded at the 31 previously recorded sites, recommendations could be made concerning future investigations at each. The general lack of subsurface materials at all the non mortuary sites which were tested in 1979 supports a recommendation for no further investigations at any of them. This recommendation echoes a similar one made nearly two decades earlier (Hoffman 1965) for most of the habitation sites scheduled for testing in 1979. Recommendations for the three inundated sites are that they should be tested when the reservoir level is lowered. It is recommended that the mortuary sites be preserved, although each is presently protected by a series of Iowa laws dealing with penalties for the disturbance of ancient burials.

METHODS OF INVESTIGATION

As a general rule, site testing involved the excavation of a series of from six to eleven test pits excavated to a depth of from 60 to 70 cm with at least one test excavated to a depth of 1 meter below ground surface. Where cultural materials were encountered below the ground surface, tests were excavated to a depth of 1 m below the depth of the cultural remains or to the depth of culturally sterile layers. Horizontal size of tests was as a general rule a 50 cm square. Tests were spaced from 10 to 20 m intervals in areas where surface indications of cultural activity were found. In instances where no subsurface materials were found to indicate the location of a previously reported site, the location specified by the Iowa Site Record was tested. Fill from all test pits was screened through one-quarter inch hardware cloth using "shaker screens."

Shovel testing was conducted at sites where no surface indications were found. This type of test was simply a series of

nearly square tests up to 30 cm square. Shovel tests were excavated with either a small shovel or a trowel. Fill from shovel tests at previously recorded sites was screened in the same manner as that from the larger 50 cm square test excavations. Shovel testing was not usually employed to test previously recorded sites when their locations could be determined and verified by the existence of cultural remains on the surface.

Auger holes like shovel testing provided a supplementary form of subsurface testing and was not used as a primary method to test previously recorded sites. Auger holes up to 1 m in depth were drilled with a power auger having an 8 inch bit. Fill from these tests was generally quite fine in texture and was examined either by screening or by troweling.

SITE TESTING

13AN1 THE ROSENCRANTZ MOUND GROUP

13AN1

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	960 - 970
Type of Remains	Mounds
Topography	Ridgetop
Estimated Size	1000 ft x 100 ft
Surface Visibility	Grass cover
Site Condition	The area to the north has been destroyed by road construction
Cultural Affiliation	Woodland
Investigations	Survey, testing
Materials Collected	7 flakes
Nearest Site or Findspot	13AN2 is adjacent on the S
Recommendations	Should be preserved

BACKGROUND

The Rosencrantz site presently consists of a series of 14 earthen mounds aligned along a level ridgetop northwest of the former confluence of Honey Creek and the Chariton River between the 960 and 970 foot contour intervals (Figure 1). The mound group is presently contained within the boundaries of Honey Creek State Park where several roadcuts have been placed along the western and northern limits of the site to provide access to recreational facilities. Presently the site is covered with mowed grass with trees interspersed between the mounds.

This site was the only one recorded by Richard Wheeler of the Smithsonian Institution during an initial survey of the reservoir area in the 1940's prior to construction of the dam. Wheeler recommended, on the basis of surface collections and the presence of mounds at the site, that extensive excavation be carried out there (Wheeler 1949). As a result of Wheeler's recommendations, further investigations were carried out at the site in the mid 1960's; Hoffman and members of a River Basin Survey team measured and tested the site in 1964 (Hoffman 1965). Another RBS field crew, under direction of Lionel Brown, tested the site again in 1966 (Brown 1967). The site was again mapped at that time. A Cultural Resources Management plan for the Rathbun Reservoir prepared for the Kansas City District Corps of Engineers

(Grantham nd) notes that the position of 13AN1 is in a high intensity public use area with nearby picnic shelters and is adjacent to access roads to the shoreline. The site is also slated for future construction of an administrative and historical center. Further investigations therefore, are necessary to determine the subsurface nature and extent of the site. Toward this end, survey and test excavations were conducted at 13AN1 in the latter part of June, 1979, by personnel from the University of South Dakota Archaeology Laboratory.

PREVIOUS INVESTIGATIONS:

The Rosencrantz mound group (13AN1) was first recorded in 1948 by R.P. Wheeler (1949). At the time that the site was recorded, the surface of the ground near several of the mounds had been extensively disturbed by logging operations and by hogs; Mounds 9 and 13 were therefore considered to have been destroyed. A 1961 survey of the reservoir area failed to mention the mound group (McKusick and Ries 1962). In 1964, one of the 16 mounds at the site, Mound 5, was tested by an RBS crew. The next year, 1965, saw the partial excavation of Mounds 11 and 16 and the testing of Mounds 1 and 15 by another RBS crew. During 1965, tests were also conducted in the open area between two of the mounds to determine the character of the fill of the site. Mounds 8, 10, and 14 are reported to have been disturbed by pothunting activities at the site and were not investigated for subsurface remains during any of the field seasons at the site (Brown 1967:3). During the 1979 field season, excavations and testing was conducted to determine the horizontal extent of 13AN1. Unexcavated mounds and the areas between mounds were not tested during 1979 since many of the mounds at the site had been previously excavated or tested. The position of the State Archaeologist of Iowa regarding excavation of burial sites also played a part in this decision. A series of four tests were excavated on the western limit of the site to determine if the cultural remains encountered in the mound fill during previous excavations (Brown 1967) extended in the direction of nearby 13AN4 to the west. Since at least the upper 1 m of the surface of the northern part of the site had been removed during construction of a road in that area, evidence for the extension of the site into that area has been destroyed. Cutbanks adjacent to the road north of the mounds showed no evidence of subsurface cultural remains.

STRATIGRAPHY:

At the conclusion of excavations of both mound fill and the area between mounds at 13AN1, Brown (1967:5) defined three distinct stratigraphic units at the site:

1. The uppermost layer is shallow from .3 to .4 ft in thickness which is gray-brown in color with dark inclusions.
2. A second, less shallow, zone of "brown loam clay" which contains most of the artifacts recovered from the site. Thickness of this stratigraphic unit is up to 1.2 ft.
3. The lowermost stratigraphic unit defined by Brown is a compact "tan clay loam" which is situated below the artifact bearing level.

Brown's comparisons of the stratigraphic components of the mound fill with those from a test between mounds produced evidence that the mounds were constructed with materials from the two uppermost units found in non-mound parts of the site. The artifacts recovered from the site are all from the mound fill and are thought to represent "residue from an earlier occupation of the area and cannot be definitely associated with the mounds themselves" (Brown 1967:7). The 1979 testing at 13AN1 verified Brown's interpretation of the stratigraphy there.

MATERIALS RECOVERED FROM EXCAVATIONS

Materials recovered from the four tests excavated at 13AN1 were limited to the uppermost 20 cm in Tests 2 and 3; 17 flakes were recovered from the upper 20 cm of the site. Test 4 produced only a single flake from a depth of 29 cm. Test 1, however, produced more material than was collected from testing at any other site or findspot in the reservoir area with the exception of 13AN18. Test 1 was adjacent to the mound group; subsurface materials decrease rapidly with distance away from the mounds. The numbers of items recovered from Test 1 are shown below:

TABLE I
QUANTITIES AND DEPTHS OF MATERIALS RECOVERED FROM
EXCAVATIONS AT 13AN1.

Depth	Materials
0 to 15 cm	24 flakes, 10 chunks
15 to 25 cm	94 flakes, 19 chunks
25 to 35 cm	29 flakes, 9 chunks
35 to 45 cm	1 flake
45 to 100 cm	nothing found

The main concentration of materials at 13AN1, as indicated from the artifactual return from Test 1, seems to be restricted to a depth of from 15 to 25 cm below ground surface in the immediate area of the mounds. Tests 2, 3, and 4, which are to the west and northwest of the mound group, produced a total of only 18 flakes from the cultural level.

RECOMMENDATIONS

Site 13AN1 has been shown by the 1979 tests to exhibit at least a limited amount of subsurface material present in the general vicinity of the mounds. Although the subsurface materials may have been unintentionally included in the mound fill and therefore may not be directly related to the mounds themselves. Since the mounds are presently within the limits of Honey Creek State Park they are protected somewhat by the presence of the park staff. More importantly, however, the mounds are protected by Iowa laws; as discussed elsewhere in this document, ancient burials in Iowa are protected by a series of laws which specify severe penalties for anyone disturbing the remains. The Office of the State Archaeologist in Iowa City (Tiffany personal communication) has recommended that 13AN1 not be nominated for the National Register of Historic Places since 1) it is adequately protected by Iowa laws and 2) other examples of Woodland mortuary sites in better states of preservation exist. For this reason, it is recommended that 13AN1 be preserved by avoidance. Road building activities and the construction of picnic shelters in the park should not be placed on or in the area of the site. The site may not be one of the best of its kind, but it is accessible to large numbers of people who utilize the park. Site 13AN1 could play a part in public education

concerning cultural resources; the placement of even a small plaque near the roadway describing the lifeways of Woodland peoples, a map of the mounds, and the importance of preserving cultural resources would serve this purpose.

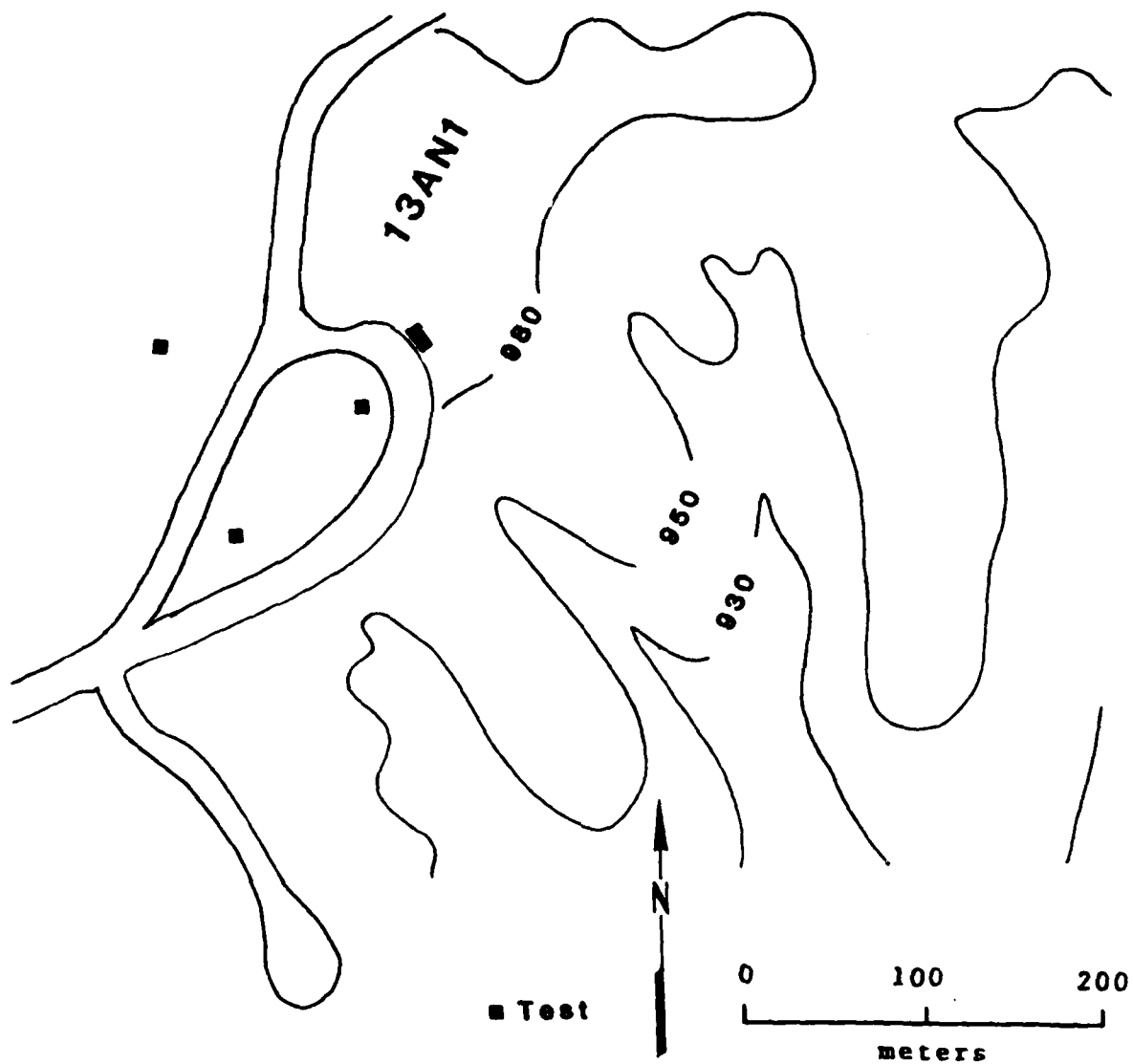
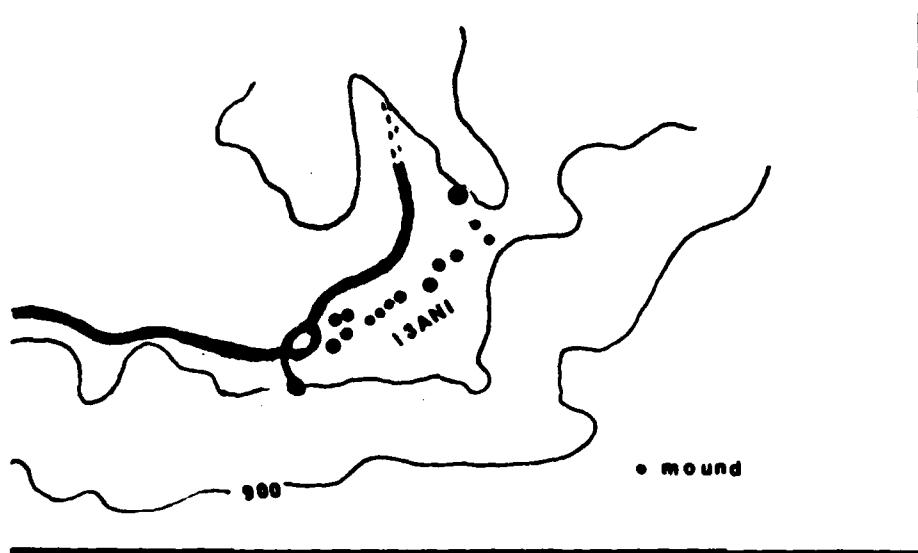


FIGURE 2. Map Showing Excavations at 13AN1

13AN2

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	940
Type of Remains	Lithic scatter
Topography	Ridgetop
Estimated Size	100 m x 17 m
Surface Visibility	Sparse grass and timber cover
Site Condition	Southern parts may be eroding
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	10 flakes
Nearest Site or Findspot	13AN1 is adjacent on the N
Recommendations	No further investigations

13AN2

This site has been reported as a lithic scatter along a narrow ridge immediately south of the Rosencrantz mound site (Hoffman and Madison 1964). The ridge on which the site is located is oriented NW-SE overlooking the former confluence of Honey Creek and the Chariton River. This generalized findspot is approximately 100 m x 16 m in size at an elevation of 940 ft. Recommendations concerning the site were that it "does not warrant further salvage operations" and that the site "does not appear to be of archaeological value" (Hoffman 1965:10). The site was included in the list of sites whose extent and nature was to be evaluated during the 1979 investigations in the reservoir area.

At the time of the 1979 reconnaissance of the reservoir area, the site area was forested over the northern half and along the eastern side. A ridge to the south has been extensively damaged by construction activities in the previous decade; a parking area, gravel road, and picnic shelter have been constructed in the southwestern and central parts of the site. To the east, wave action has removed as much as 15 to 20 meters of the ridge. Cutbanks of from 8 to 15 meters now mark the southern borders of the site.

During the survey of the site, a thin scatter of flakes was noted on the ground surface. At that time there was no apparent concentration of materials in any part of the site. The upper 90 cm of the cutbank of the site were examined and troweled to determine if cultural stratigraphy was evident at the site. No cultural materials or visible stratigraphy was evident in the cutbank. A series of four tests was then excavated to determine the subsurface character of the site and if it extended northward toward 13AN1.

No material was recovered from tests to indicate that cultural remains exist at the referenced location.

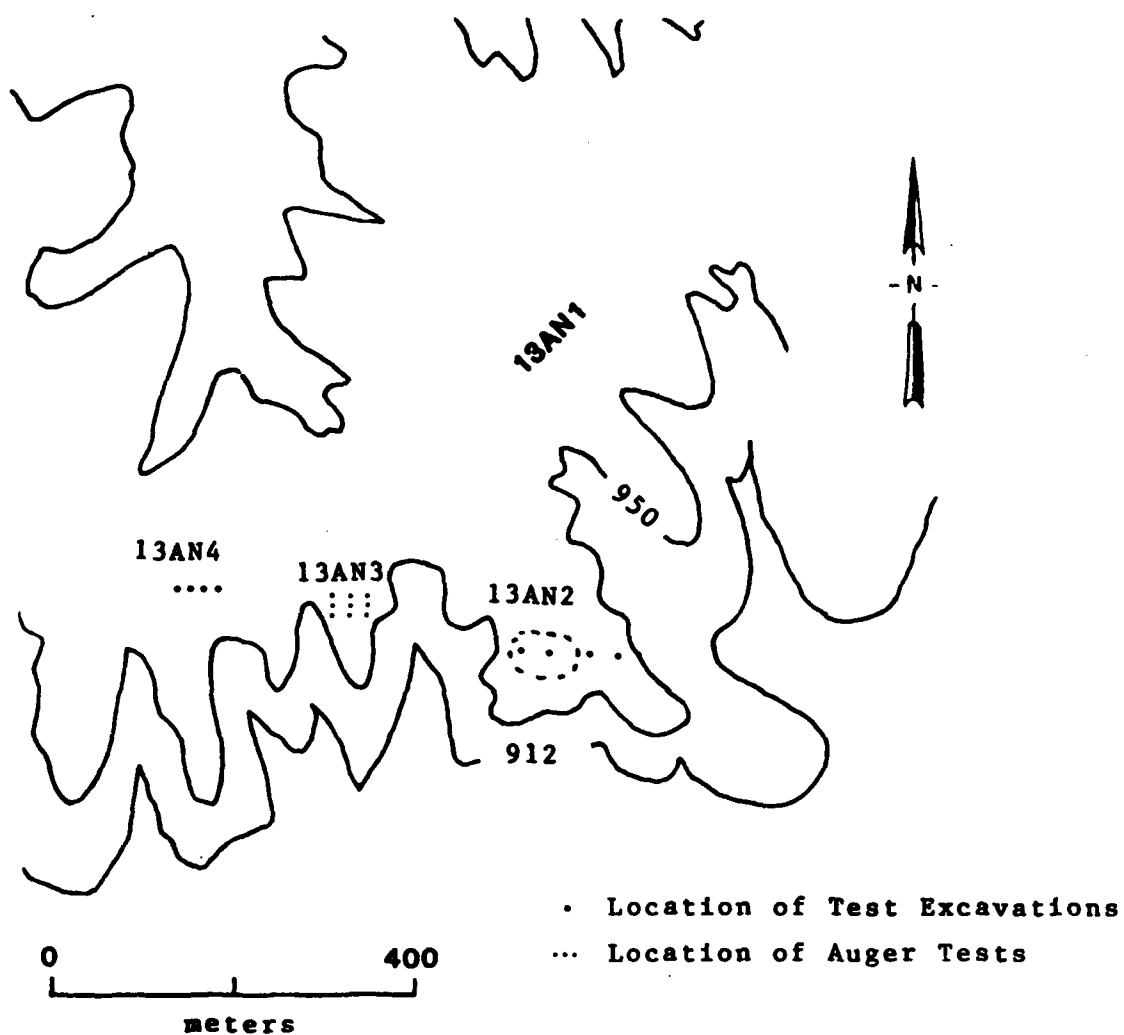


FIGURE 3. Map Showing Test Locations at 13AN2, 13AN3, and 13AN4

13AN3

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	920
Type of Remains	Buried hearth and tools
Topography	Washout in bluff
Estimated Size	Unknown
Surface Visibility	Excellent, eroding surface
Site Condition	Probably eroded by wave action
Cultural Affiliation	Suggested Paleo-Indian
Investigations	Survey
Materials Collected	None
Nearest Site or	
Findspot	13AN1 and 13AN2 500 m to the E
Recommendations	No further investigations

13AN3

The original description of this site describes the location of as being in a washout in a south-facing bluff at an elevation of 950 ft (Hanson and Ries 1962). Charcoal had been reported in an exposed erosional feature approximately six to eight ft below the ground surface. Paleo-Indian projectile points had been reportedly collected by the landowner's granddaughter from the site, but had been misplaced at the time the site was reported in 1962. In 1964, the site was visited by an RBS crew; it was reported at that time that the deposit was probably secondary. No materials were collected at that time. McKusick and Ries (1962) state that the site consisted of a wide charcoal horizon and suggest that it may have been the result of an ancient forest fire. Hoffman (1965:10) reports that no cultural evidence was found at the site and recommends that "no archaeological import is attached to the site". Grantham (nd) lists the site as a possible Paleo-Indian occupation. During the 1979 survey, the exact location of the site could not be precisely determined from descriptions in the literature. No cultural evidence was found either on the surface or in any of the cutbanks or erosional remnants which were inspected. A series of auger holes drilled in the vicinity of the site failed to reveal any evidence of either the charcoal layer or of any cultural materials.

Since no proof exists that cultural materials have ever been recovered from the site or from the vicinity of the site, recommendations cannot be made concerning the site. As in the case of many other reported sites in the reservoir area, forms were completed solely on the basis of evidence supplied by local informants. No collections have been made from the location by professional archaeologists.

No materials were noted in the surface of the bluff edge.

Testing and facing of the bluff edge also failed to produced evidence of a site there. No further investigations at the site are warranted.

13AN4

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	940
Type of Remains	Lithic scatter
Topography	Ridgetop
Estimated Size	10 acres
Surface Visibility	Grass and timber cover
Site Condition	Destroyed if subsurface levels existed
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	36 flakes
Nearest Site or Findspot	13AN1 is 600 m to the NE
Recommendations	No further investigations

13AN4

This site was recorded by Hansen and Ries (1962) and is an occupation located on a ridge southwest of the Rosencrantz mound group. It is estimated that the site size is perhaps as large as 10 acres. The surface collection from the site in 1962 consisted primarily of chipping waste, although it was noted that local artifact collectors had found artifacts in the area. Hoffman (1965:11) reports that the artifact distribution was restricted to the heads of two southeast oriented gulleys that abut the main ridge approximately 500 ft southwest of the westernmost mound mapped at 13AN1. He reports no definite area of occupation, but collected lithic waste and a few bifacial tools from the general area. Recommendations were that "The site does not appear to have salvage potential "(Hoffman 1965:11). The site is one of those which were to be tested during 1979 to determine their nature and extent.

During the 1979 survey, the exact location of the site could not be established with certainty since road construction along the ridgetop had destroyed the original configuration of that landform. No aboriginal material was collected from the surface of the site or was noted on the surface of the ground in the area. A series of five, 50 cm square tests were excavated in the area where 13AN4 is thought to have been. Depths of the test squares ranged from 50 cm to 1 m. No cultural materials were recovered from depths below 30 cm. The stratigraphy at the site roughly parallels that defined at 13AN1 to the northeast, suggesting that perhaps the upper portions of 13AN4 have been destroyed by construction and farming. Sixteen flakes were recovered from levels above 20 cm during testing of 13AN4 and 4 flakes were recovered from the level between 20 to 30 cm below

the surface. Recommendations for this site are that no further investigations are warranted.

13AN9

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	980
Type of Remains	Mounds
Topography	Ridgetop
Estimated Size	Unreported
Surface Visibility	Excellent, cultivated field
Site Condition	Destroyed by plowing
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	None
Nearest Site or	
Findspot	USD90 is 100 m to the S
Recommendations	No further investigations

13AN9

This site is a reported pair of mounds on a ridgetop to the west of Honey Creek Park. Presently the site is cultivated fields. A paved road has been constructed along the ridgetop to provide access to Honey Creek Park. There is no indication that the individuals who originally reported the site ever visited the location and observed the mounds first-hand. Information was supplied by an informant. Hoffman and Madison (Hoffman 1965) searched the area in 1964 and failed to verify the location of the site. No recommendations were made at that time other than a statement that nothing had been found to verify the claim of a site. As a part of the 1979 investigations in the reservoir area, site 13AN9 was to be tested to determine its significance. The 1979 University of South Dakota Archaeology Laboratory personnel met with results similar to those experienced by earlier investigators; no trace of the site was found. This site is one of several encountered in the Rathbun Reservoir area which were reported in 1962 and were based on secondary information which was never verified. No map of the site has ever been produced, nor is one produced in this document. To present a map of the purported 13AN9 location here would only lend the site a degree of credibility that it does not warrant. On the basis of a lack of archaeological evidence, no further investigations at 13AN9 are recommended. If possible, reference to the site should be removed from the Iowa State Site Record.

This site has never been verified by any investigator and was not visited by the persons who originally reported it.

13AN15

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	900 - 915
Type of Remains	Lithic scatter
Topography	Ridgetop
Estimated Size	Indeterminate
Surface Visibility	Grass cover
Site Condition	Destroyed if site ever existed
Cultural Affiliation	Unknown, no materials ever collected
Investigations	Survey, testing.
Materials Collected	2 flakes were recovered from tests
Nearest Site or Findspot	13AN52 is 1.6 km to the NE
Recommendations:	No further investigations

13AN15

This site was recorded by Hanson and Ries (1962) as a possible occupation located on the ridge above and south of the Chariton River channel. Like many of the other sites recorded by the same individuals, the site was not visited at the time that it was reported. The information recorded for this site is sketchy and states only that a local collector had materials from the location.

Hoffman (1965) searched the area but did not find evidence of a site or findspot. Weichman (1976a) also failed to establish the existence of a site at the specified location. Grantham (nd) lists the site as one of unknown cultural affiliation. No investigator who has been involved in an actual reconnaissance of the area has recommended additional investigations at this site. The site was included as one to be tested during 1979 to assess its extent and to allow determination of National Register significance.

Presently, the site is in grasses with trees along the southeastern portions of the location. The area has been extensively disturbed by construction activities and by livestock. Park rangers indicated to the field crew that the area had been used as a fuel and supply depot during construction of the dam. Although only four flakes were noted in the reported area, testing was conducted in the general vicinity to determine if parts of the site were in subsurface context. To determine the nature of the site, a series of 15 tests averaging 50 cm square were placed at 20 m intervals in the area thought to be the site location. Maximum depth of tests was 1 m below ground surface. Two flakes were recovered from the 15 tests. One

specimen was at 14 cm below ground surface, the other was at a depth of 22 cm. No further investigations are recommended for this site.

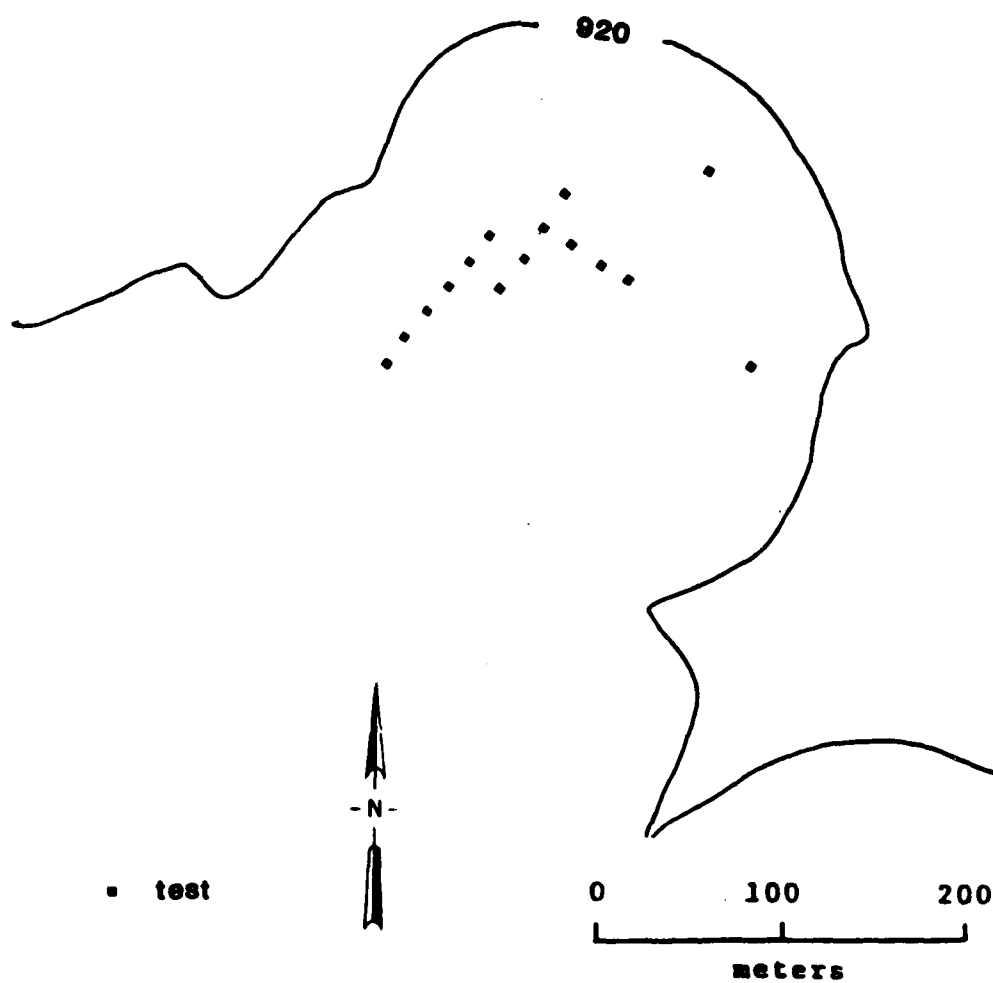


FIGURE 4. Map Showing Location of Test Excavations at Site 13AN15

13AN16 THE MILLEDGEVILLE MOUND GROUP

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	890 - 900 ft
Type of Remains	Mounds and ditch
Topography	Terrace now under water
Estimated Size	75 m x 100 m (approximate)
Surface Visibility	Under water
Site Condition	Eroding by wave action
Cultural Affiliation	Woodland?
Investigations	Survey, testing on beach
Materials Collected	3 flakes, 1 sherd at shoreline
Nearest Site or	
Findspot	USD25 is 225 m to the NE
Recommendations	Test when the site is above water

13AN16

This site is located between the 890 to 900 ft contour intervals on the extreme western end of Bridgeview Area which means that it is inundated at all but the driest times when the reservoir water level is low. The site is reported to consist of a series of 21 low, hemispherical mounds surrounded by a ditch. Unlike 13AN15 to the east, materials were collected from this site in quantity and the location of the site was verified by Hoffman in 1964. As mentioned above, the site is presently under water with little chance of exposure unless drought conditions occur in the area and the reservoir level drops below the level of the conservation pool. Recommendations were that the site should be thoroughly excavated (Hoffman 1965:17). Since the site was inundated at the time of the 1979 investigations, it could not be tested. It is doubtful that the site can be tested until water levels of the lake are lowered by drought.

Since the site was inundated and could not be tested, tests were conducted at USD25 where surface materials suggested an extension of 13AN16. None of the six, 1 m square tests produced materials from subsurface context. No subsurface materials were recovered from USD25. It is recommended that 13AN16 be excavated when a drop in lake level exposes the site.

ARTIFACTS

CERAMICS:

One sherd comprises the ceramic assemblage from the shoreline to the northeast of 13AN16. This sherd is very water worn with all broken edges quite rounded from wave action. Indistinct cord impressions mark the exterior. This specimen is approximately 8 mm thick and is grit-tempered.

13AN17

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	920
Type of Remains	Lithic scatter
Topography	Bluff slope
Estimated Size	Not reported
Surface Visibility	Good, eroding surface
Site Condition	Assumed destroyed
Cultural Affiliation	Woodland?
Investigations	Survey, testing
Materials Collected	5 flakes
Nearest Site or	
Findspot	USD36 is 250 m to the E
Recommendations	No further investigations

13AN17

This site was first reported by Hansen and Ebel (1961) and consists of a sparse scatter of chipping waste in an area approximately 150 ft by 150 ft along the east face of a bluff overlooking an unnamed tributary of the Chariton River. Prior to construction of the reservoir, the Chariton River channel was 1.25 miles south of the site.

McKusick and Ries (1962) report that a small surface collection was made from the site at the time it was reported. Hoffman and RBS crew members located the site in 1964 but did not inspect it. They report (Hoffman 1965:18) that the site was in heavy pasture at the time of their visit and recommended that "The site seems to have little archaeological value". Grantham (nd) reports that the cultural affiliation of the site is Woodland. A part of the 1979 investigations in the reservoir were directed toward determining the extent and nature of the deposit at 13AN17 for National Register recommendations.

The location reported for the site is presently on the eastern end of Bridgeview area on the west bank of a large cove. At the time of the 1979 survey, the site was covered with heavy vegetation and erosion from wave action had removed an estimated 10 to 14 m from the bluff edge. Only 5 flakes were recovered from the surface of the site. The southeastern portion of the bluff edge has been riprapped with rocks to slow erosion in that area. Eleven, 50 cm square tests placed at random intervals in the area failed to indicate subsurface materials. Test depths ranged from 50 cm to 1 m. This site is assumed to have been destroyed by erosion and wave action. No further investigations are warranted due to the lack of subsurface material.

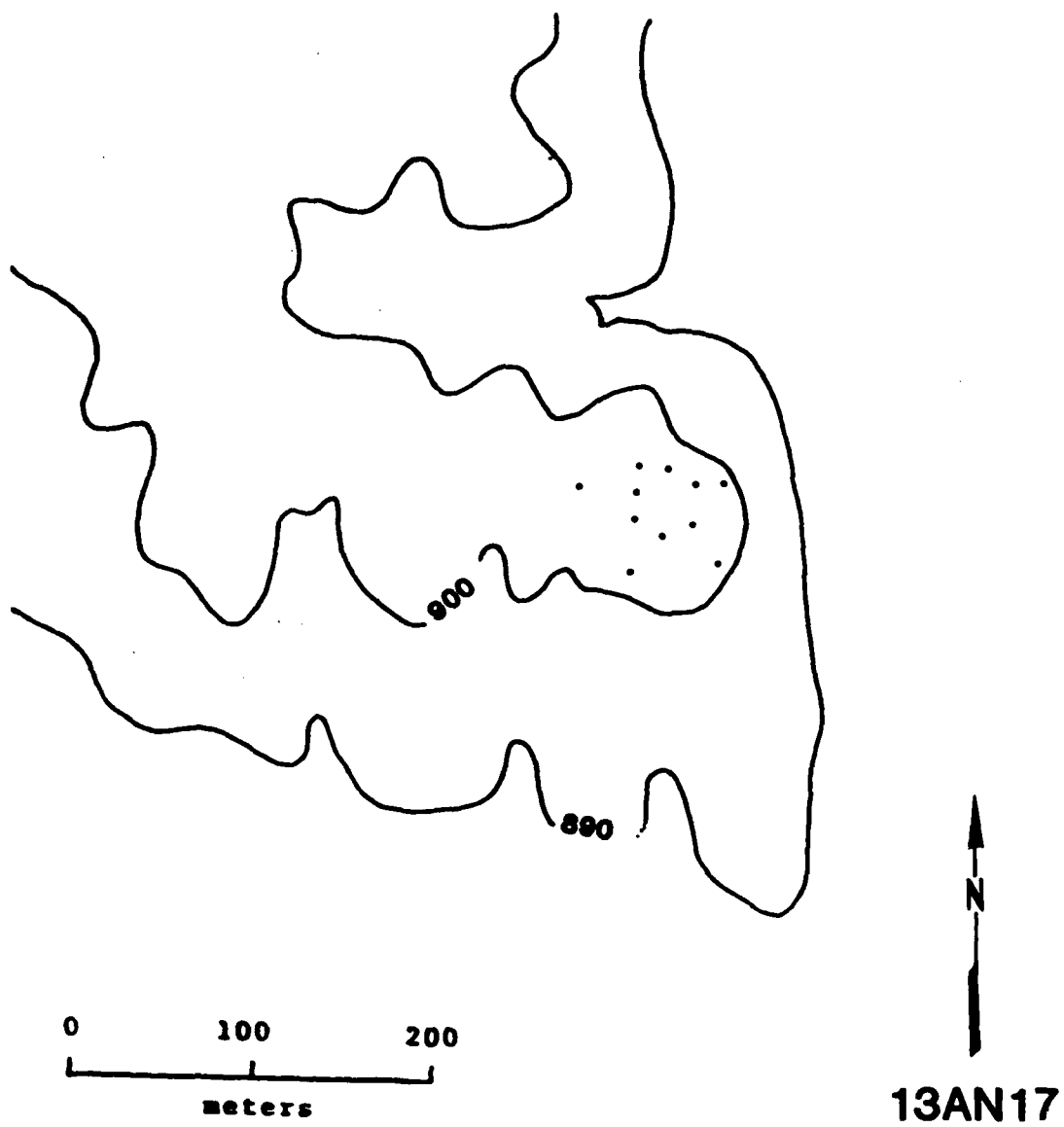


FIGURE 5. Map showing locations of tests at 13AN17

13AN20

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	910
Type of Remains	Artifact scatter
Topography	Beach
Estimated Size	50 - 60 m along beach
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	None
Nearest Site or	
Findspot	in the same Qtr Qtr Section as 13AN41
Recommendations	No further investigation

13AN20

This site is a generalized findspot where lithic materials have been found at an elevation of 900 ft. The site was recorded by Charles Ebel (1962). The location and description of this site place it under water approximately 100 m offshore. No surface collections were made from the site either by the original surveyors or by the RBS. Recommendations by the latter are that the site "appears to have no archaeological value" (Hoffman 1965:19). Limited testing was to be conducted at this site during the 1979 field season to determine extent and nature of the deposit for National Register significance.

Since 13AN20 is at an elevation which is underwater, it could not be tested during the 1979 investigations in the reservoir. No remains were found at any nearby shoreline location during the 1979 investigations at Rathbun Lake. It is recommended that site 13AN20 be tested when the lake level drops.

13AN21

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	910
Type of Remains	Lithic scatter
Topography	Beach
Estimated Size	70 m along beach
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	76 flakes, 2 projectile points
Nearest Site or Findspot	USD47 is 140 m to the SE
Recommendations	No further investigations

13AN21

This site was reported by Charles Ebel (1962). The elevation of the site is reported at 910 ft. Nothing was collected from the site in 1962 and the Iowa Site Record states that "nothing has been found in recent years". The site is presumed to have been destroyed by the construction of farm buildings and a feed lot which were inundated by the reservoir. The site was not visited by the RBS and "appears to have little archaeological value" (Hoffman 1965:19). The 1979 investigations included limited testing at this site to determine if any of the deposit remains. Flakes and lithic tools were found on the west side of a cove on the north shore of the north fork of the reservoir and at the tip of a point of land to the west. However, site 13AN21 was inundated at the time of the 1979 survey and could not be tested. Although the actual findspot reported by Ebel is now under water, two findspots, USD46 and USD47, were found to the west of the reported location. The two findspots may be parts of 13AN21, but there is no data to support or refute this suggestion at this time. A series of six 50 cm squares were excavated to depths of up to 1 m at the location of the two findspots. No subsurface cultural remains were recovered. Since 13AN21 could not be tested during 1979, it is recommended that this site be tested when lake levels are lowered.

ARTIFACTS

Projectile Points:

Two projectile points were found on the surface of this site. One is broken and the other is a nearly complete specimen. The broken specimen found at this findspot is 21.7 mm in length, 22.9 mm in width, and 5.5 mm in thickness. The raw material is orange gray chert. Since the base is missing, it cannot be determined if the point was stemmed or corner notched.

The second point collected from this findspot is a nearly complete reworked specimen with a small part of one side of the base missing. Raw material is speckled pink chert. This specimen was probably modified for use as a hafted scraper. The specimen is 27.9 mm in length, 37.7 mm in width, and 8.3 mm in thickness.

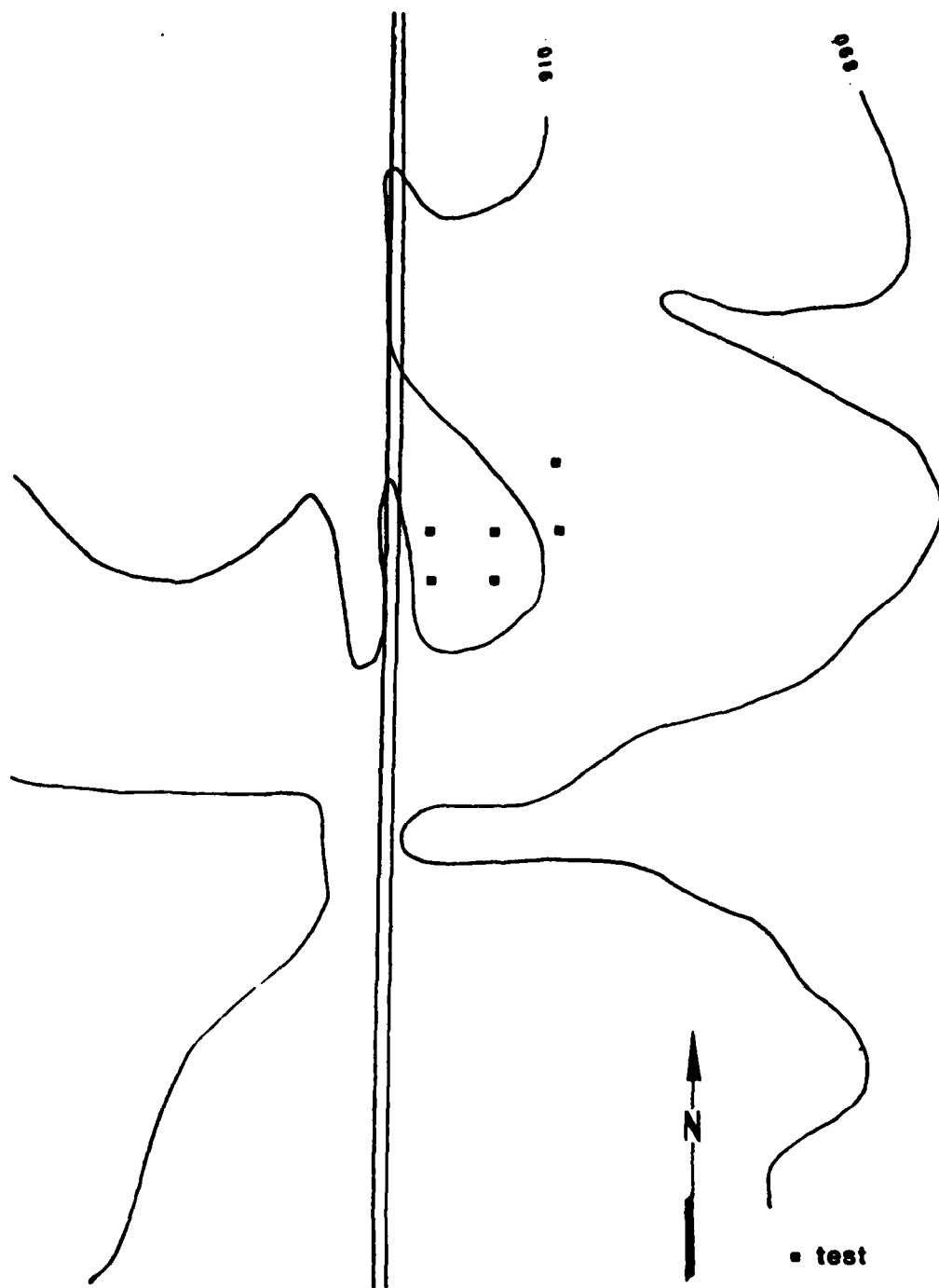


FIGURE 6. Location of Test Excavations at 13AN21

13AN22

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	890 - 915
Type of Remains	Lithic scatter
Topography	Beach
Estimated Size	100 m along shoreline
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding by wave action
Cultural Affiliation	Woodland?
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	USD22 is 420 m to the N the same side of the river
Recommendations	No further investigations.

13AN22

This lithic scatter was reported by McKusick and Ries (1962) as a report from an informant that materials had been collected from a point on the east bank of the Jackson branch 150 m above its junction with the Chariton River. Little other information is provided on the Iowa Site Record for this site. Hoffman (1965:19) reports that the Iowa survey in 1962 could not locate the spot and that the RBS did not investigate the location since the site "does not appear to have archaeological value". Limited testing was to be conducted at this site in 1979 to allow evaluation of the extent and nature of the deposit.

The only cultural materials collected from locations which are near that reported for 13AN22 were those recovered from USD26. Grantham (nd) reports that the elevation of 13AN22 is between the 890 and 915 contour intervals; USD26 was defined at an elevation of 906 ft. The legal description originally recorded for 13AN22 is relatively coarse and includes only two quarter designations, so it is not known if the location of USD26 is that of 13AN22. USD26 was tested by means of six 30 cm square tests ranging in depth from 50 cm to 1 m. No subsurface materials were recovered from the tests. Based on the lack of both surface and subsurface material, no further investigations are recommended.

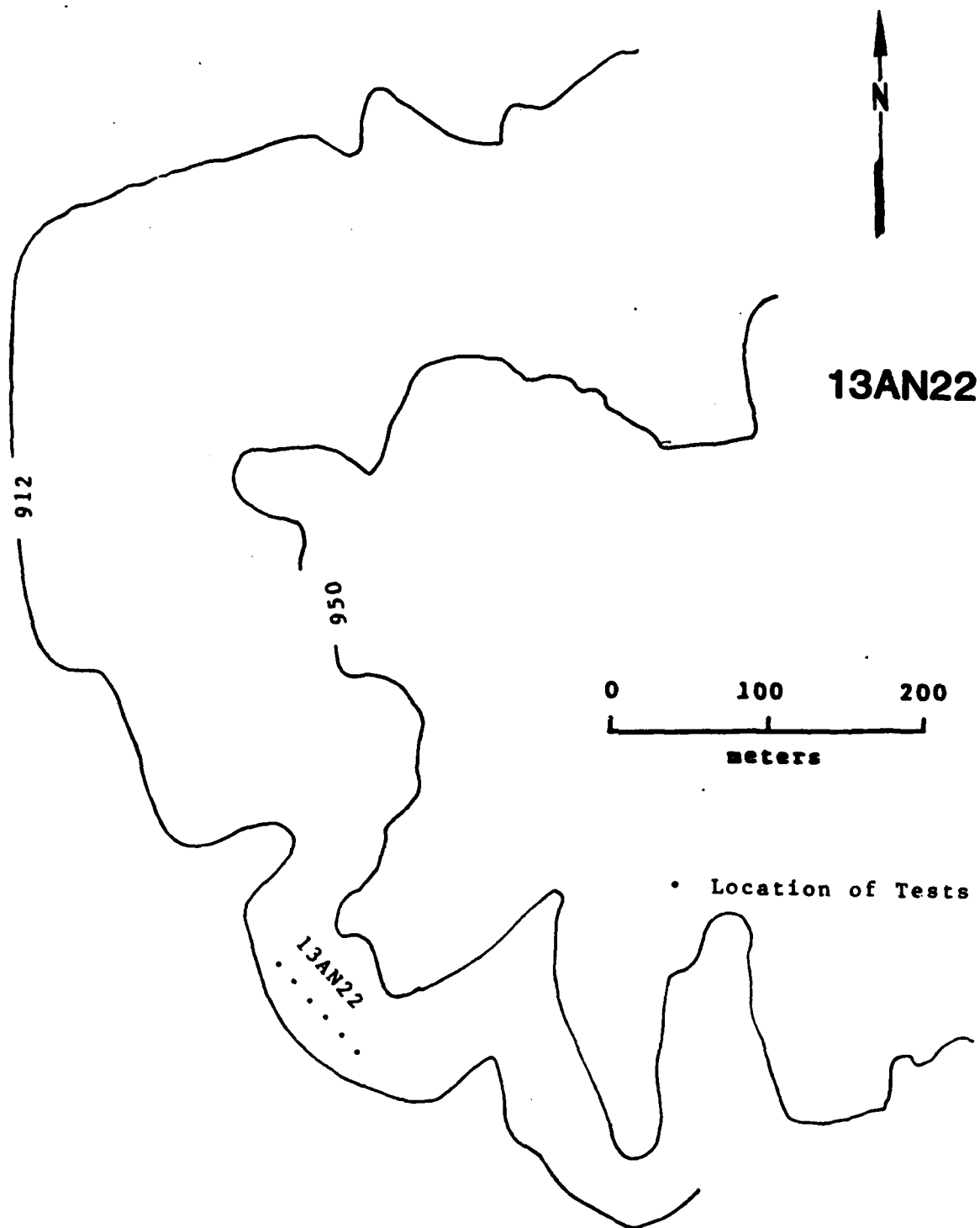


FIGURE 7. Location of Test Excavations at 13AN22

13AN25

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	960 - 972
Type of Remains	Lithic scatter
Topography	Southwest facing hillside
Estimated Size	Unreported
Surface Visibility	Moderate to heavy cover
Site Condition	Erosion stabilized by cover, but site is in a high use area
Cultural Affiliation	Unknown, no diagnostic artifacts
Investigations	Survey and testing
Materials Collected	None
Nearest Site or Findspot	USDS is 380 m to the NE
Recommendations	No further investigations.

13AN25

This site was first recorded in 1962 and was visited in 1964 by Hoffman who failed to find cultural evidence in the vicinity other than two small chips which were not collected at that time. The RBS recommendations are that the site "has no archaeological value" (Hoffman 1965:20). Limited testing at the site during the 1979 field season was required to determine the extent and nature of the deposit for an assessment of National Register significance.

Like previous investigations at 13AN25, the 1979 field party also failed to find evidence of a site in the reported location. Although no surface indications were found in the reported location, testing was conducted in the vicinity of the reported area to determine if the heavy cover present there concealed evidence of cultural activity. The site is reported to be situated on a southwest facing hillside and is purported to extend into a narrow gully in that direction. The Iowa Site Record states that artifacts were also found scattered throughout the general area. At the time of the 1979 survey, the area was in prairie grasses, weeds, and small shrubs. Surface visibility was limited to approximately 10 to 20 percent of the ground surface. No cultural materials were collected from the surface of the site in 1979.

Ten tests, approximately 50 cm square and spaced at 20 m intervals, were excavated to depths of from 40 cm to 1 m in the area where the site reportedly existed. Although fill from all of the tests was screened through one-quarter inch screen, no cultural materials were found. On the basis of testing and reconnaissance of the area, it is concluded that the site was either originally a very thin scatter and has been removed by

erosion or the site never existed in the first place. The lack of surface and subsurface remains from the site supports a recommendation of no further investigations.

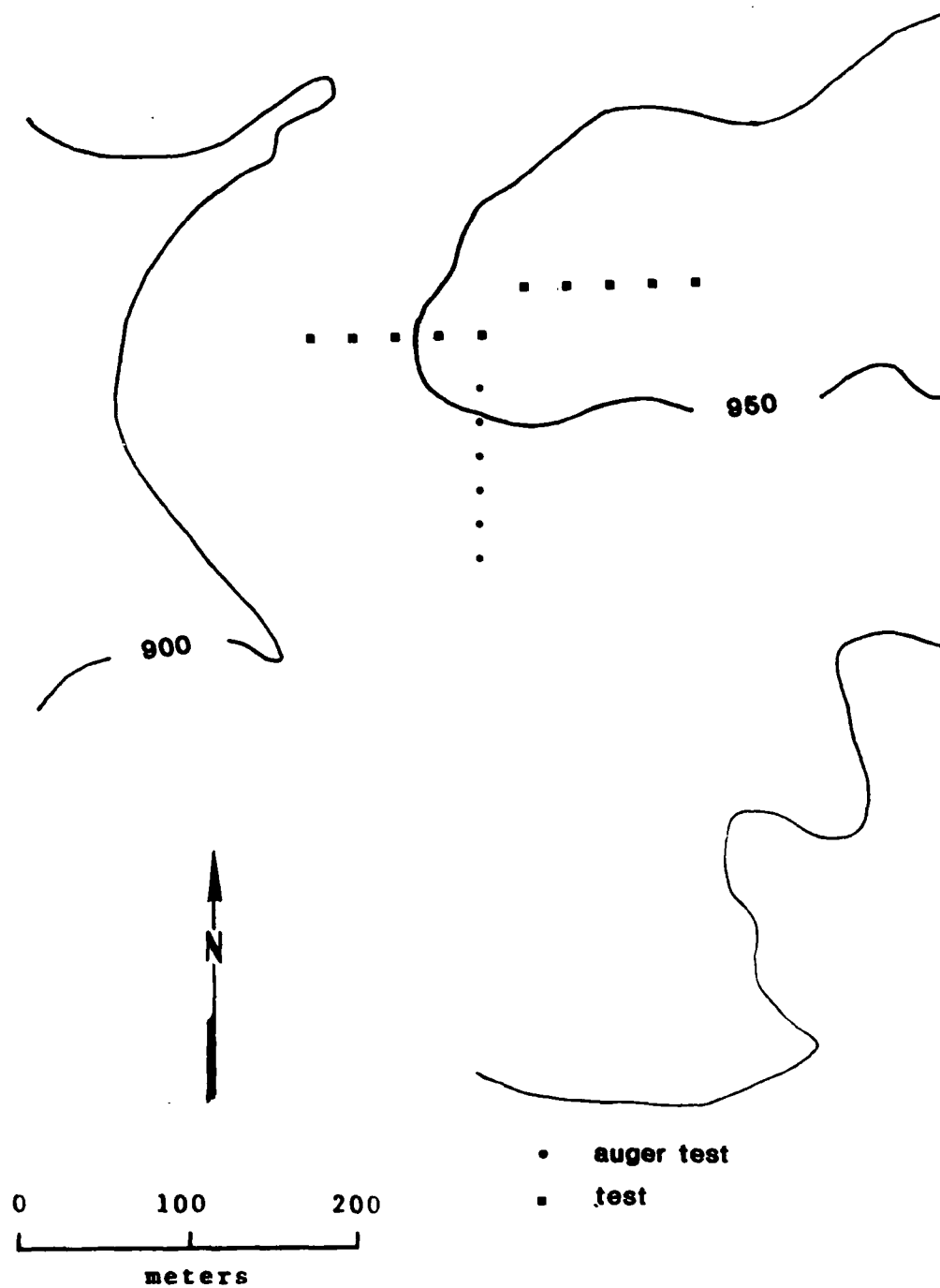


FIGURE 8. Location of Test Excavations at 13AN25

13AN26

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	930 - 961
Type of Remains	Generalized findspot
Topography	Northwest facing hillside
Estimated Size	150 ft x 150 ft (Deegan 1962)
Surface Visibility	Moderate to heavy cover
Site Condition	Little erosion due to heavy cover, but the site is located in a public use area
Cultural Affiliation	Unknown, no diagnostic artifacts
Investigations	Survey, testing: 15 Tests, 6 auger holes
Materials Collected	None
Nearest Site or Findspot	USD3 is 300 m to the W
Recommendations	No further investigation

13AN26

This site was first reported by James Deegan (1962) who also reported sites 13AN25 and 13AN27 in the same area. Members of an RBS crew visited the site in 1964 and made a small surface collection of flakes (Hoffman 1965).

The site is located on a northwest facing hillside and, like 13AN25 which is 800 m to the south, it extends downslope toward the present boundaries of the lake. Although artifacts were collected from the site at the time it was reported, no other collections have been made from the location other than a few waste flakes collected in 1964 by a RBS crew. The site is described as a "generalized findspot" (Hoffman 1965:21).

Site 13AN26 was tested in 1979 with 15 tests which were excavated to depths of from 60 to 75 cm. Since the site was reported to have extended downslope toward a freshwater spring, the tests were aligned at 20 m intervals in that direction. When no materials were encountered below the surface of the site, a series of six auger holes was also placed perpendicular to the lines of test squares to determine if materials extended in that direction. Since no cultural materials were recovered from any auger hole or test pit at this site. No further investigations are warranted there.

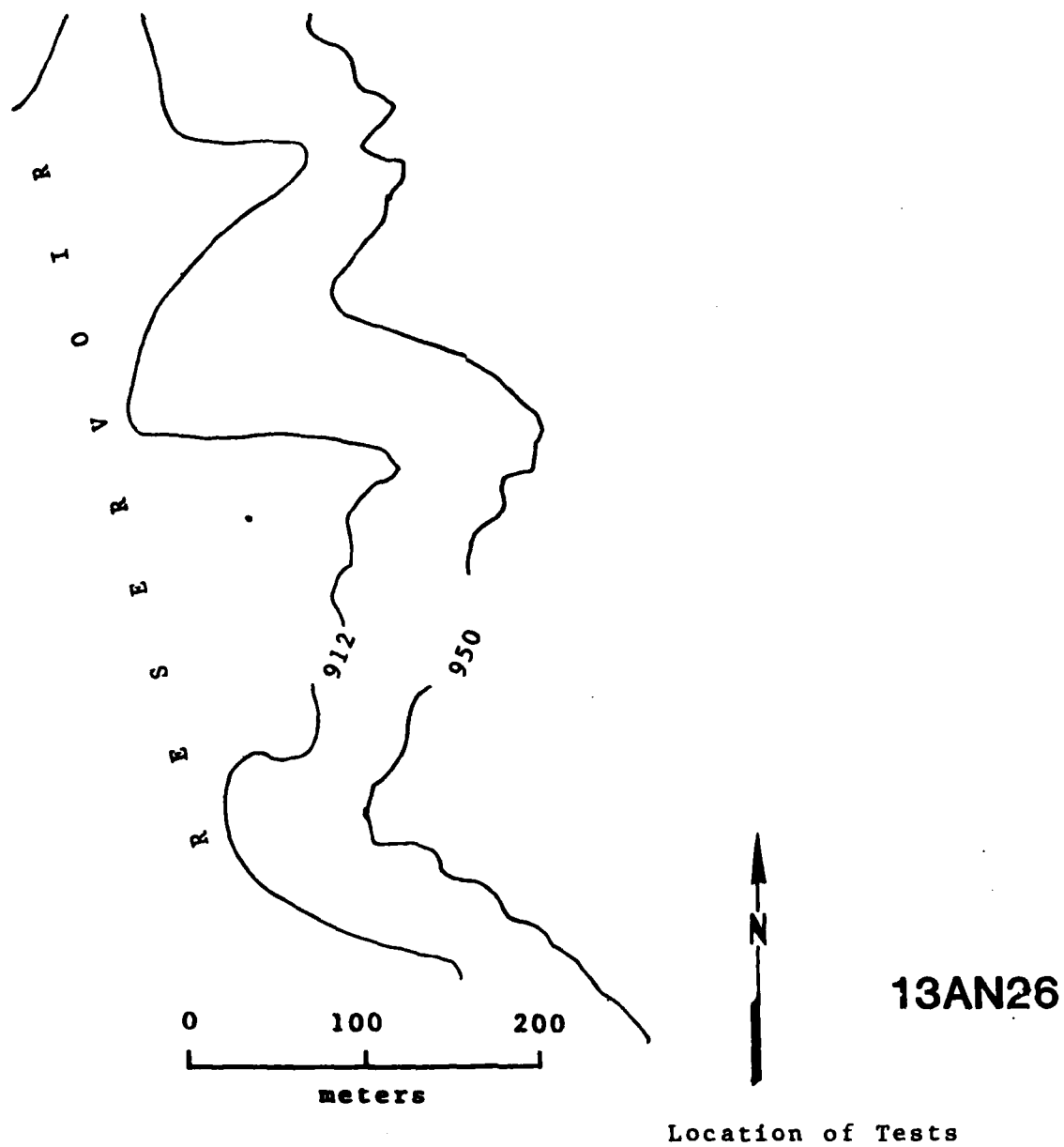


FIGURE 9. Locations of Test Excavations at 13AN26

13AN27

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	920 - 953
Type of Remains	Mound and artifact scatter reported
Topography	Ridgetop east of the former Chariton Channel
Estimated Size	Unreported
Surface Visibility	Moderate to heavy cover
Site Condition	Eroded
Cultural Affiliation	Unknown
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	USD5 is 300 m to the SW
Recommendations	No further investigations

13AN27

This site was first reported by Deegan (1962) along with 13AN25 and 13AN26. Site 13AN27 is atop a ridge which was formerly east of the Chariton River and above the floodplain. Presently the site is in the southernmost part of Buck Creek Public Use Area. The site is reported to consist of a mound which has since been destroyed and is reported to also have included a scatter of lithic debris and tools. The original report states that materials were collected from the site in the past but fails to list any materials collected by Deegan. In 1964, the RBS visited the area of the site twice and failed to locate it. The 1979 University of South Dakota field crew also failed to locate any evidence of a site in the location reported by Deegan. A series of 16 auger holes scattered throughout the reported area failed to yield any evidence of an occupation. If a site did exist in the reported area, it has since been destroyed. For this reason, no further investigations at the location of 13AN27 are recommended.

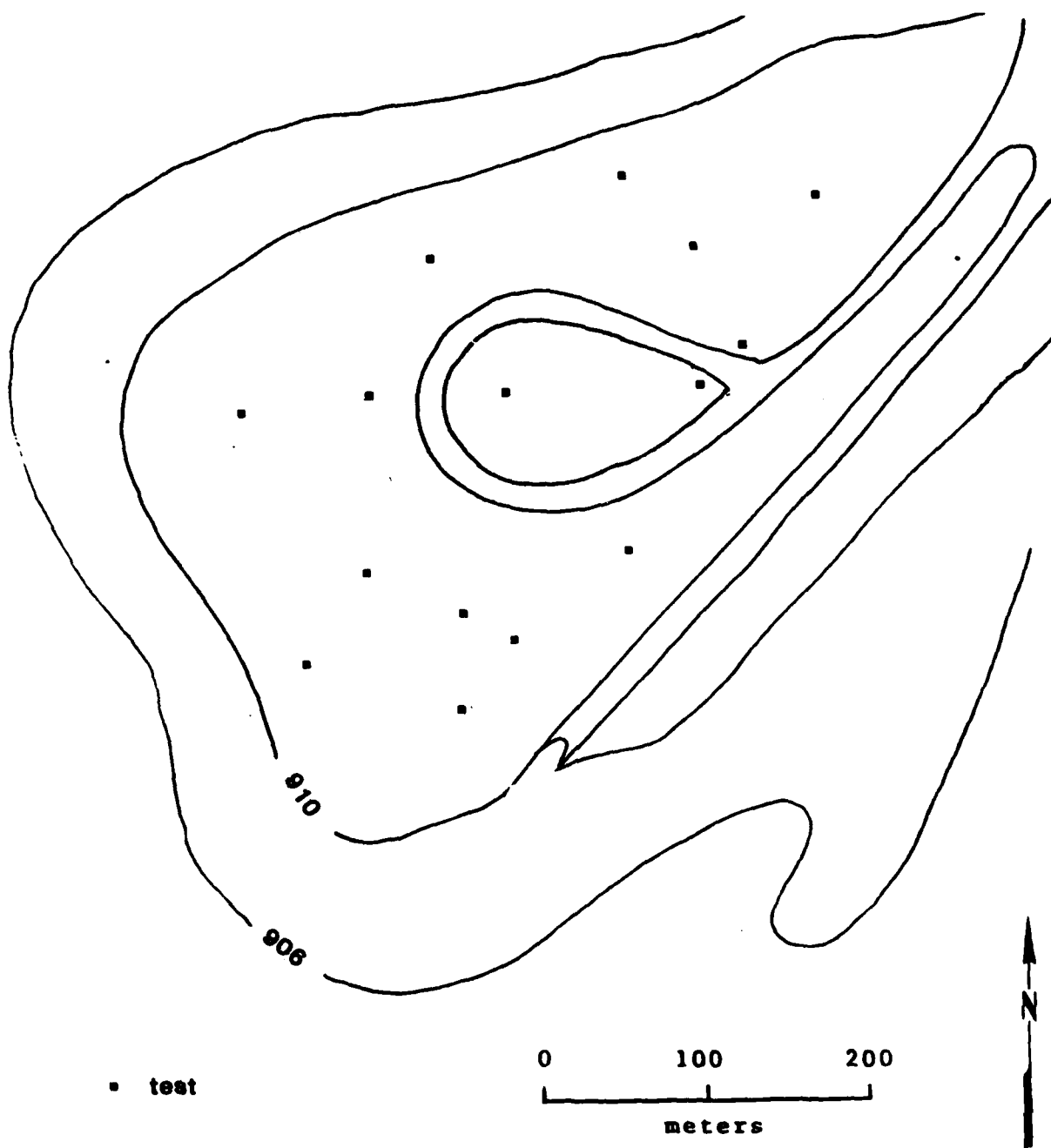


FIGURE 10. Location of Test Excavations at 13AN27

13AN28

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	908 - 915
Type of Remains	Lithic scatter
Topography	Knoll top
Estimated Size	Unreported by original investigator
Surface Visibility	Shoreline, no cover
Site Condition	Eroded
Cultural Affiliation	Unknown
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	USD27 is 1 km to the E
Recommendations	No further investigations

13AN28

This site was reported by Keahbone (1962); the location was never verified nor were materials collected from the location supplied by an informant. It is doubtful that the person reporting the site ever visited the location to verify the information supplied by an informant. During 1979, no cultural materials were noted on the surface at the location indicated on the Iowa Site Record. Tests placed along the shoreline failed to indicate the presence of subsurface remains in the indicated area. Grantham (nd) places the site's location at an elevation which would correspond to the elevation of the shoreline during 1979. It is not known if a site ever existed in the area reported. Hoffman (1965:21) states that "The existence of 13AN28 is dubious". No further investigations are warranted at this 'site'.

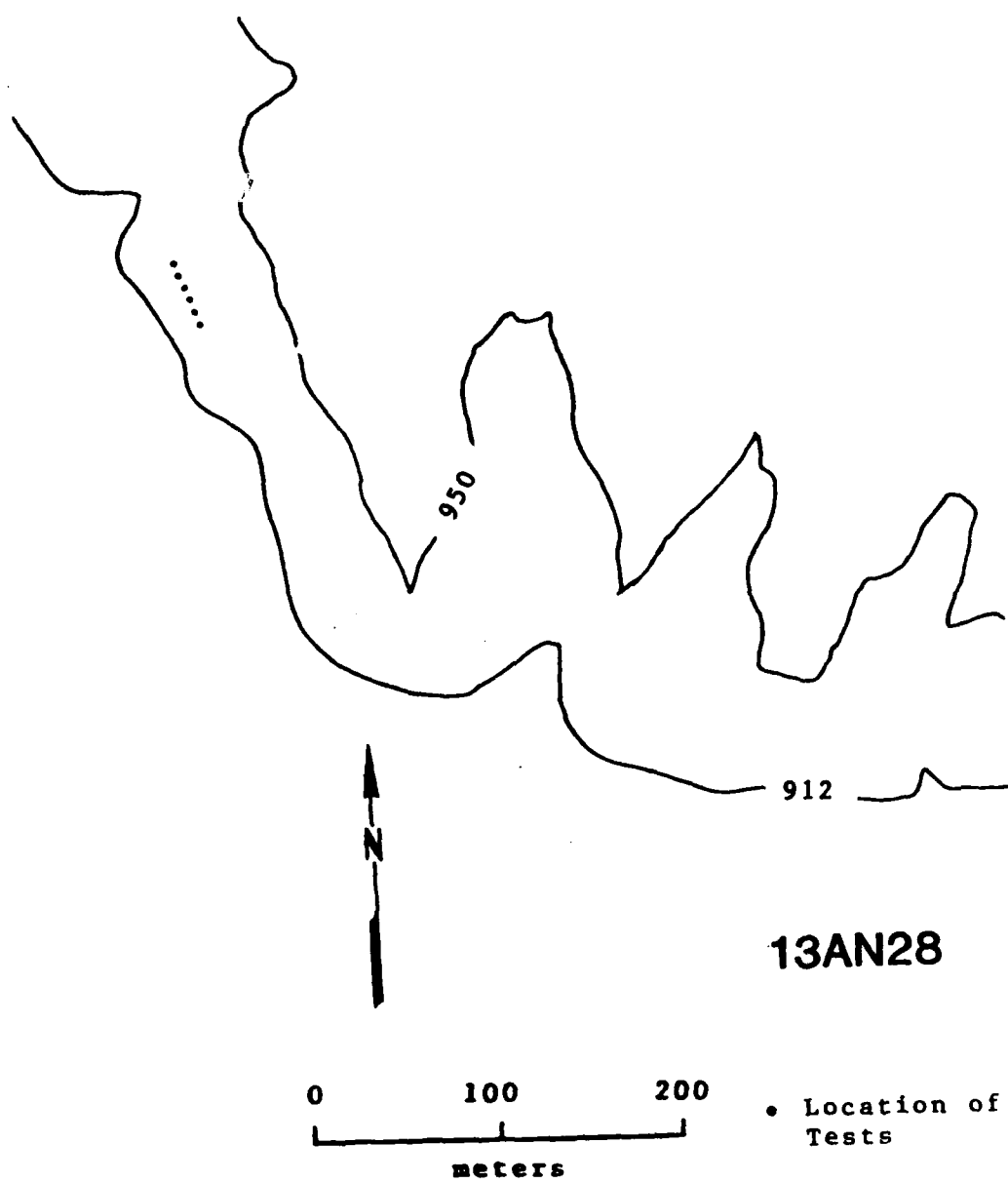


FIGURE 11. Location of Test Excavations at 13AN28

13AN31

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	960 - 985
Type of Remains	Lithic scatter
Topography	Bluff top
Estimated Size	Unknown
Surface Visibility	Poor, heavy timber and weeds
Site Condition	Eroded
Cultural Affiliation	Unknown
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	USD31 is 125 m to the S
Recommendations	No further investigations

13AN31

This site is located on a heavily timbered bluff south of the Chariton River channel. A previous owner reported having found broken projectile points and other lithic tools in the area. No material was collected at the time the site was reported (Ries 1962), although the landowner was supposed to have a small collection in his possession. The RBS crew did not visit the site in 1964 since it was considered to be outside the reservoir area. Cultural affiliation of this site is unknown since no collections have ever been made from the site other than that attributed to the former owner. The 1979 investigations at the site were directed toward defining the extent and nature of the remaining deposit there.

At the time of the 1979 survey, the area was heavily wooded with thick ground cover. No surface indications of a site were found during a reconnaissance of the area. A series of fifteen 50 cm square tests were excavated in the area indicated on the original Iowa Site Record form submitted by Ries (1962). Depths of tests ranged from 50 cm to 80 cm. No cultural materials were recovered from any of the 15 tests. Since nothing was found on the surface or in subsurface context at the site, no further investigations are warranted.

As with other sites reported in the reservoir during the early 1960's, no materials were collected during the original survey and it is doubtful if the original investigators ever visited the site. The results of the 1979 testing indicate that no evidence for a site at the specified location presently exists. Since

materials were recovered along the shoreline to the east and north of the location given for 13AN31, either the location as originally reported was wrong, or the site has been destroyed by erosion.

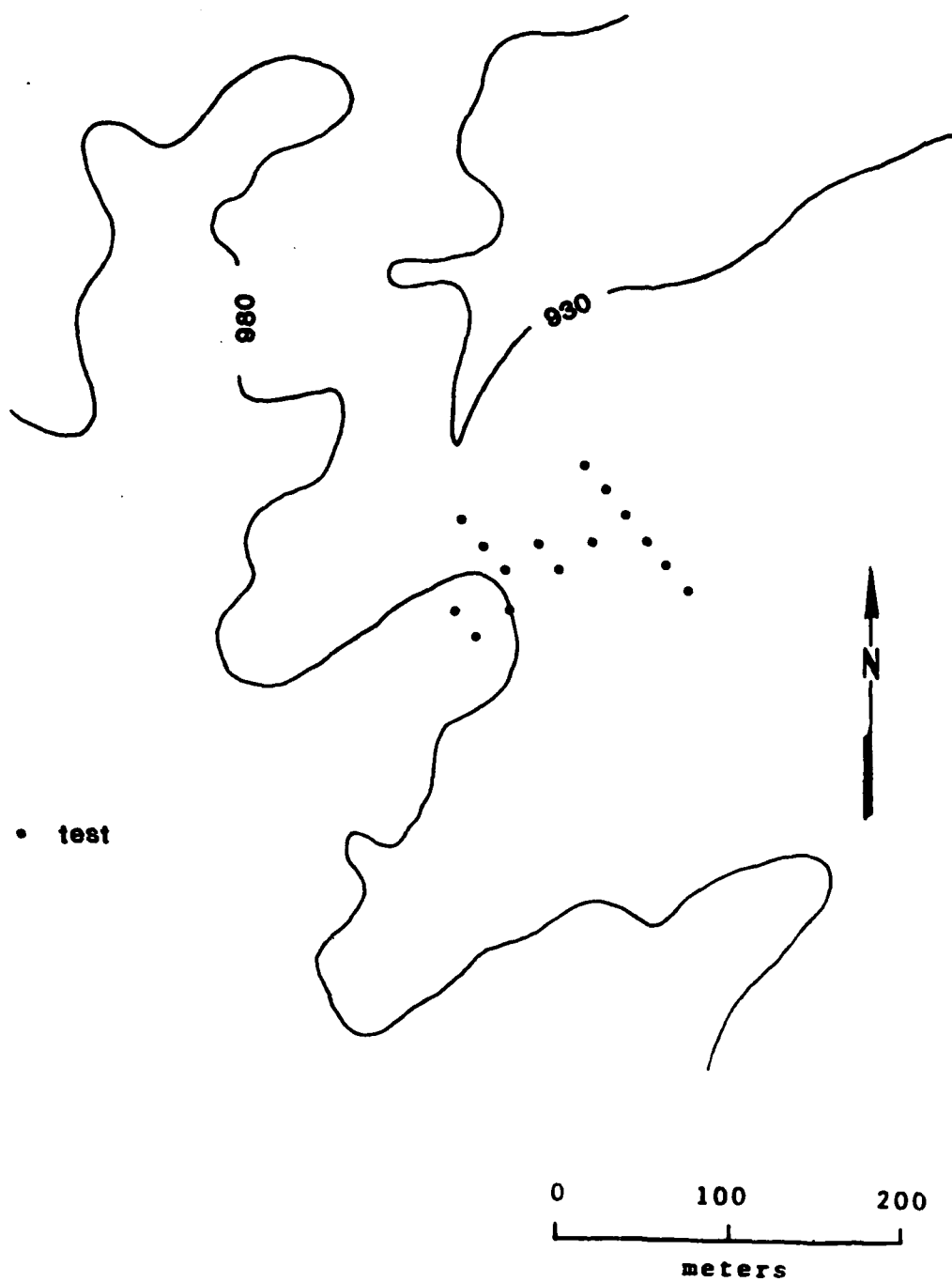


FIGURE 12. Location of Test Excavations at 13AN31

13AN44

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	905
Type of Remains	Scatter
Topography	Beach
Estimated Size	20 m x 40 m
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Woodland
Investigations	Survey, testing
Materials Collected	6 flakes
Nearest Site or Findspot	13AN45 is 410 m to the SE
Recommendations	No further investigations

13AN44

This site was reported by Weichman in 1976 as being a location 20 m by 40 m in size on the north bank of Honey Creek cove at an elevation of 905 ft (Weichman 1976b). Only 41 artifacts were collected from the site, but a local informant claimed to Weichman that much of the site had been inundated. Testing was conducted at the location in 1976 and revealed no cultural materials or features in a subsurface context. Recommendations at that time included additional testing to determine the significance of the inundated portions of the site. Grantham (nd) assigned this site a Woodland affiliation based on a surface collection made by Weichman (1976b). A surface collection was made at the site in 1979 by members of the University of South Dakota field crew. A part of the 1979 investigations in the reservoir area were devoted to testing this site, although the lake level was little changed from that when Weichman tested the site in 1976.

The site was tested in 1979 with six, 50 cm square tests, the deepest of which was excavated to a depth of 1 m. No subsurface materials were recovered from below the immediate surface of the site. Since the site was on the shoreline, it appears to have been destroyed by wave action. Up to 20 m of the deposit (horizontally) could have been removed by erosion.

This site has probably been destroyed by erosion due to wave action. A "bench" of up to several meters has been carved out of the shoreline by wave action at roughly the 906 ft contour interval. Since no subsurface materials were recovered, it is assumed that the lower components of the site have been removed if they existed in the area which is presently the shoreline.

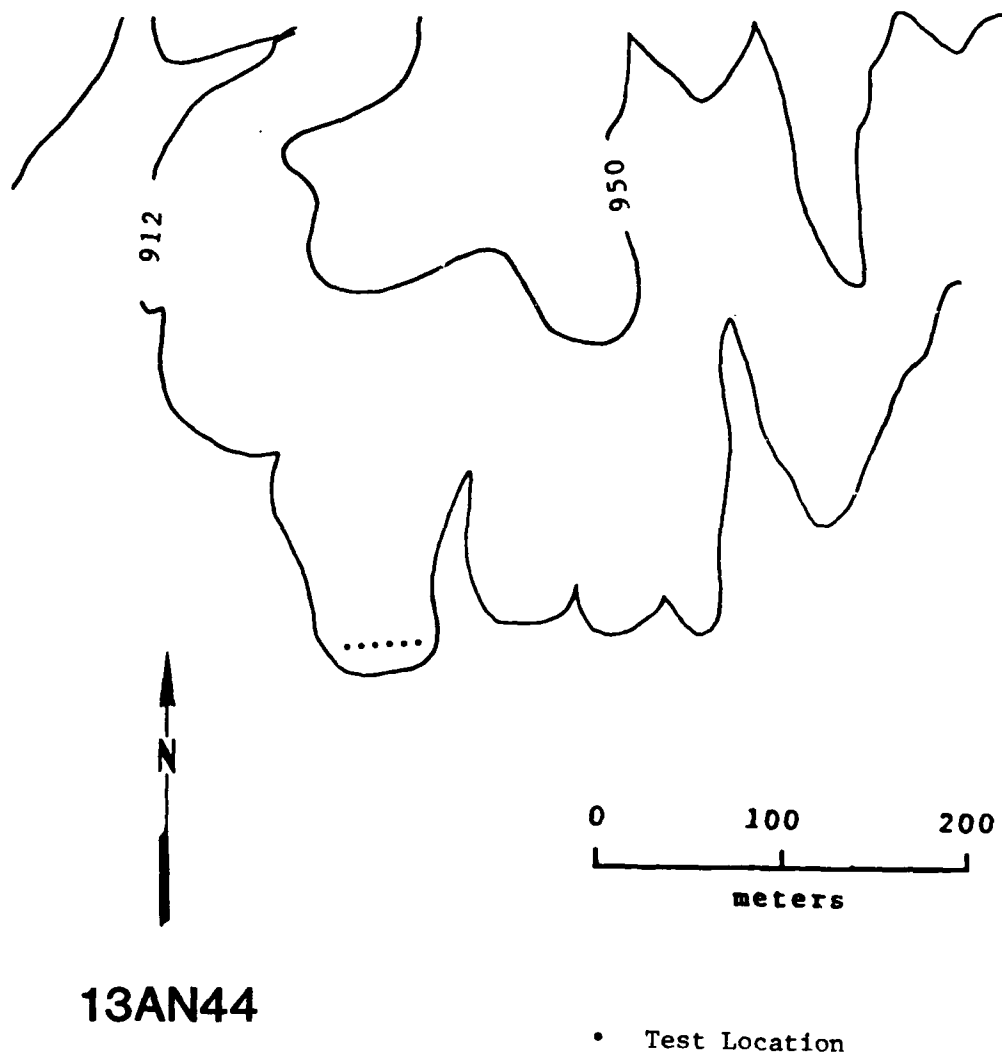


FIGURE 13. Location of Test Excavations at 13AN44

13AN45

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906.5 - 907
Type of Remains	Artifact scatter
Topography	Beach
Estimated Size	10 m X 20 m
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Woodland
Investigations	Survey, testing
Materials Collected	10 flakes, 123 sherds, 1 projectile point
Nearest Site or Findspot	13AN44 is 410 m to the NW
Recommendations	No further investigations

13AN45

This site was recorded by Weichman (1976b) and is situated on a terrace immediately adjacent to the Rathbun Lake shoreline on the north bank of Honey Creek cove. The site is northeast of Honey Creek State Park. Site size was originally estimated as approximately 10 x 20 m at an elevation of 905 ft. Lithic materials had been collected from the site at the time of its reporting. Testing of the site was recommended (Weichman 1976b).

This site was relocated by members of the 1979 field crew and an extensive surface collection was made at that time. Collections from the site include flakes, tools, and ceramics. At the time of the survey, the beach was approximately 12 m wide with a series of low benches along the west side of the site. The majority of artifacts from the site came from within .5 m vertical distance of the water level of the lake (approximately 906.5 ft). Some of the lithic debris was collected from along the low benches on the west side of the site from as high as 1 m above water level.

The site was tested with a series of eight 50 cm square tests, seven of which were excavated to depths of 1 m. Five of the tests were spaced at 15 m intervals away from the water along the long axis of the point. Three of the tests were placed across the short axis of the point. No subsurface materials were recovered from any of the tests. If Weichman's recommendations for further investigations at 13AN45 are to be carried out, the lake level must be substantially lower to avoid simply duplicating the 1976 testing of the site, as was the case in 1979.

It is possible that the source of the materials recovered from the surface of the site (one of the most prolific in the reservoir) is below the 905 ft water level. Many of the sherds recovered from the site exhibit a rolled appearance and some of the flakes recovered from the surface of the site came from the strand line at the water's edge, as if they were washed ashore. The results of the testing of site 13AN45 during 1979 indicate that there are no subsurface portions of the site above 905 ft elevation. Much of the chipping debris noted on the surface of this site was not collected.

ARTIFACTS

Projectile Point:

A single triangular projectile point (Figure 15e) was recovered from the surface of the site. The specimen is complete and is 18.8 mm in length, 13.6 mm in width, and 2 mm in thickness.

Ceramics:

One hundred and twenty-three pottery sherds were collected from the surface at 13AN45. The size range of these sherds ranges from approximately 8 mm x 10 mm to 58 mm x 34 mm. All the sherds, even the thinnest, have heavy grit-temper (up to 6 mm) over their largest dimensions. The grit-temper appears to be composed of rock and granite, although an occasional sherd has what appears to be sand-temper. Four surface treatments are apparent on the body sherds. The largest category of body sherd surface treatment is the plain category, which includes 68 sherds with a mean thickness of 7.4 mm. The second category is a surface treatment of single or compound cord roughening. This class has 44 sherds with a mean thickness of 6.8 mm. One sherd is 4.7 mm thick. The fourth category includes two sherds with cord-wrapped stick impressions. Both sherds are 8 mm thick. While the mean thickness of decorated versus undecorated sherds varies by .6 mm, this could simply be a function of the position on the vessel in which some of the sherds were positioned. Thicker, plain sherds usually form the base of a vessel and the thinner, decorated sherds usually are in the shoulder, neck or near the rim of a vessel.

The cord-wrapped stick impressions on the two body sherds are

intriguing; one sherd has six wraps around the stick per centimeter and is very tight, with the angle exceeding 45 degrees. The second sherd has a seven wrap per centimeter usage and an angle of twist on the cord-wraps of about ten degrees, making for a very tightly wrapped stick. Three rim sherds from this findspot are all assignable to the Woodland tradition but are different from each other in many ways. The first is a rim sherd with an extremely flat lip, 6.22 mm thick (Figure 15b). The rim has a cord-wrapped stick impression near the lip which was too weathered to assess in terms of cordage manufacture. The lip has a basically wavy configuration because of the depth to which the cord-wrapped stick was pressed, raising a slight bulge on the interior of the vessel (Figure 15c). The vessel appears to be vaguely Havanoid and compares favorably to Anderson (1971: Figure 3-7f). The second rim sherd looks very similar to the first except that it simply has very weathered vertical cord-roughening on the exterior of the vessel. The vessel has an extremely flat lip, 8 mm thick at the lip and tapering rapidly to 6 mm thick at the break. The third rim in the surface sherds is a plain rim with a slightly rolled lip (Figure 15d). The vessel has the appearance of having been very crudely made. Below the lip is a row of bosses approximately 20 cm apart. The creation of these bosses on the exterior seems to have led to an almost channel appearance with punctates on the interior of the rim to raise the bosses. A similar sherd was recovered from the mound fill at 13AN1 which is on the blufftop 1.5 km to the south.

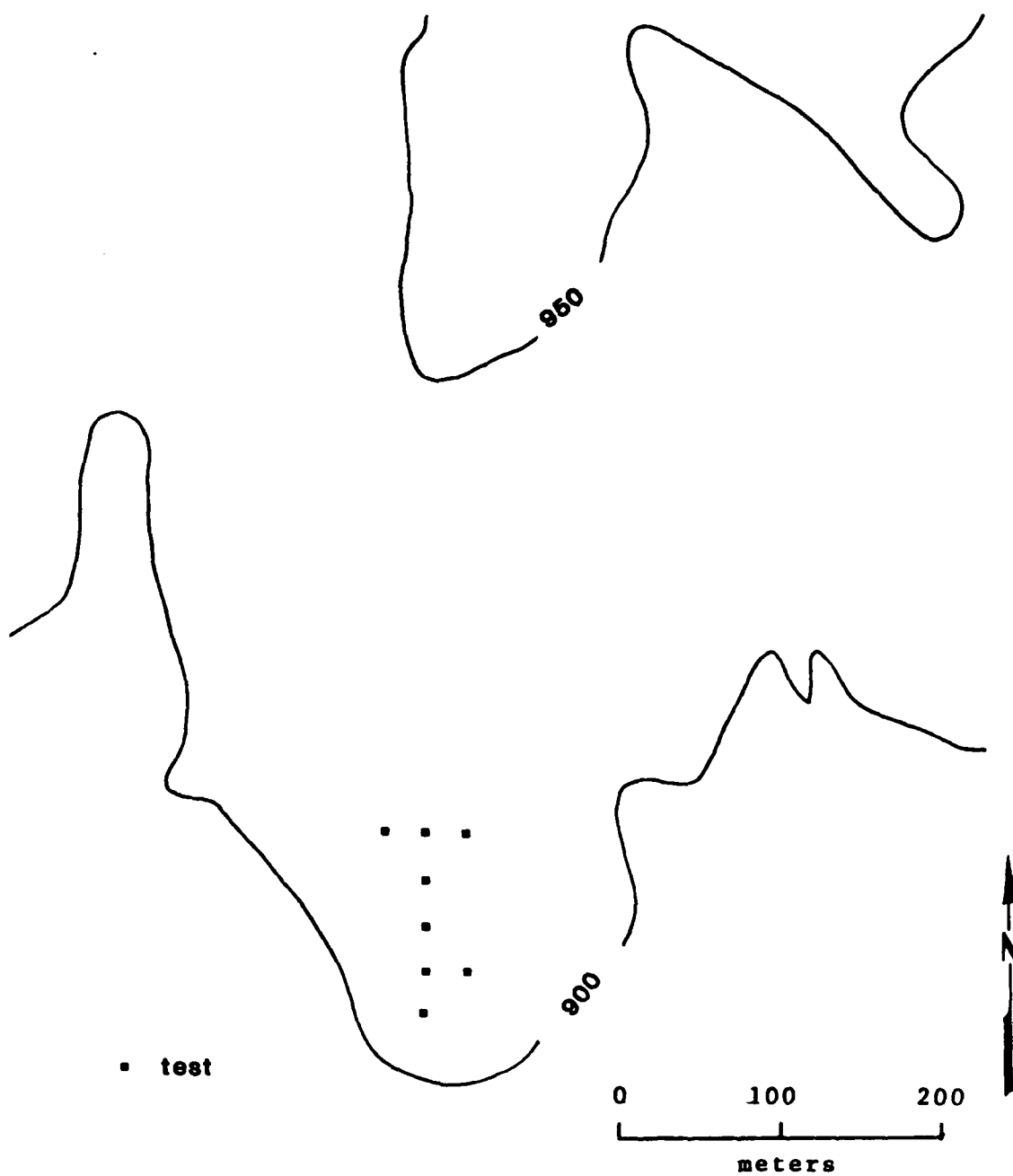
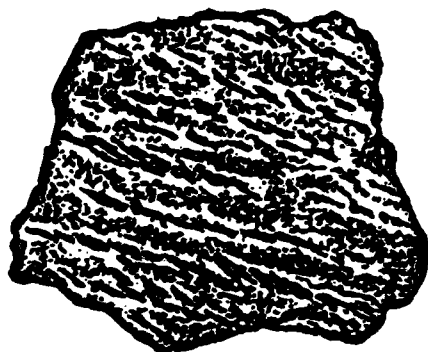


FIGURE 14. Location of Test Excavations at 13AN45



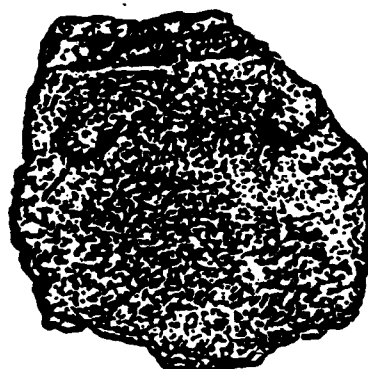
a
13AN45



b
13AN45



c
13AN45



d
13AN45

FIGURE 15. Artifacts from the Surface of 13AN45

13AN50

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	910
Type of Remains	Artifact scatter
Topography	Terrace Remnant
Estimated Size	Unknown
Surface Visibility	Poor, area covered by vegetation
Site Condition	Destroyed by construction
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	None within 1 km
Recommendations	No further investigation

13AN50

The site is a generalized findspot where lithic materials have been found and is located near an area disturbed by construction activities associated with the building of the fish hatchery. The site is situated approximately 300 m to the southeast and below the Rathbun Lake dam. During the original survey of the site, only 21 artifacts were recovered there. It was estimated at the time that only 10% of the site remained. Recommendations for limited testing at the site were made by Weichman (1976b). Testing which was conducted at the site in 1979 was directed at determining the nature and extent of the deposit.

During the 1979 investigations, the site was tested by means of 7 tests measuring 50 cm square. Tests were excavated to depths of up to 1 m. No cultural materials were recovered either from the surface of the site or from any of the tests. At the time of the 1979 investigations, the site was covered with heavy weeds. Nothing found during the 1979 testing and survey of the site would support a recommendation of further investigations at site 13AN50. It is concluded that the site was destroyed during construction of the fish hatchery and that little remains.

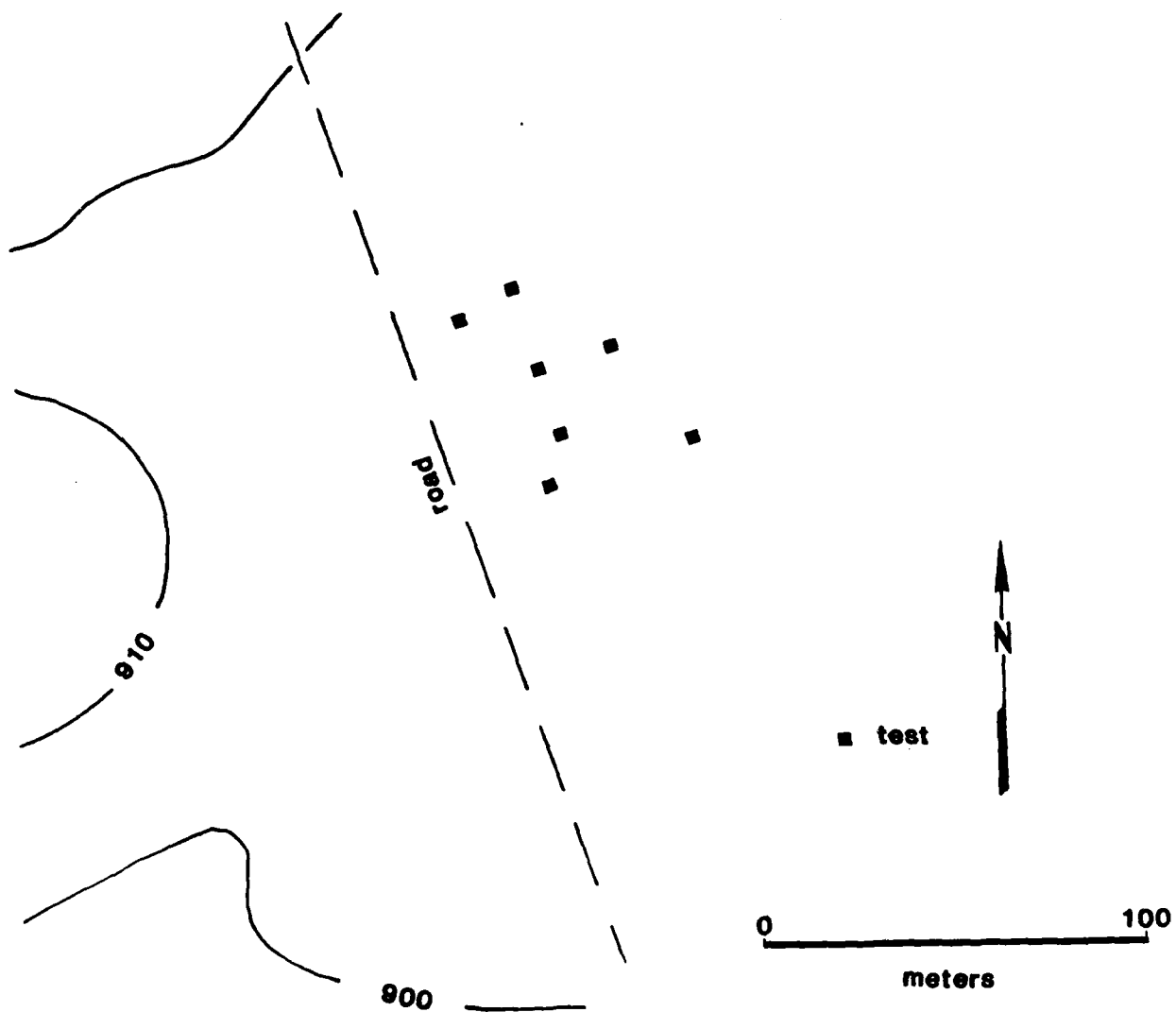


FIGURE 16. Location of Test Excavations at 13AN50

13AN201

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	880 - 900
Type of Remains	Lithic scatter
Topography	Ridge slope facing east
Estimated Size	Approximately 50 m x 50 m
Surface Visibility	Good
Site Condition	Destroyed
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	11 flakes
Nearest Site or	
Findspot	USD15 is 400 m to the NW
Recommendations:	No further investigations

13AN201

This site was reported by Hoffman (1965) and consists of a thin scatter of lithic debris measuring 50 m x 50 m. Recommendations made in 1965 were that "no significance is attached to the site". Only a few flakes were collected from the area by the RBS and it was noted that strip mining had destroyed most of the ridge occupied by the site (Hoffman 1965:25). The site is presently in a picnic and camping area on the south shore of the reservoir approximately 200 m west of the Island View boat ramp. Testing was to be conducted at this site in 1979 to determine the nature of the deposit.

Testing at the site failed to confirm that materials exist in an undisturbed state below ground surface. A series of seven tests was placed in the area where a thin scatter of flakes was encountered on the surface of the site, but no subsurface materials were encountered during testing. The lack of subsurface materials at the site precludes additional investigations there.

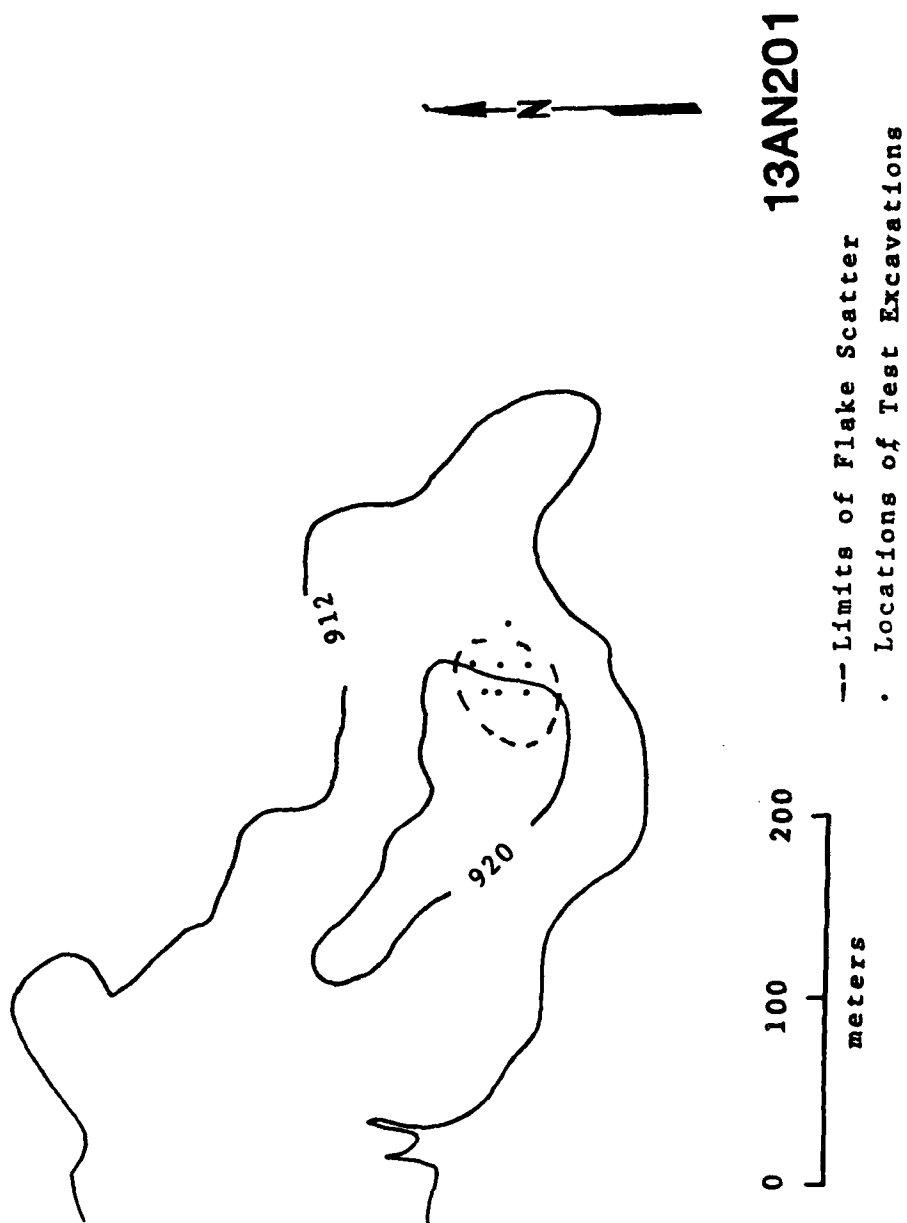


FIGURE 17. Location of Test Excavations at 13AN201

13AN202

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	950-962
Type of Remains	Lithic scatter
Topography	Ridgetop
Estimated Size	25 x 100 yds
Surface Visibility	Good, moderate to heavy cover
Site Condition	Destroyed
Cultural Affiliation	Unknown
Investigations	Survey, testing
Materials Collected	
Nearest Site or	
Findspot	USD4 is 380 m to the NW
Recommendations	No further investigations

13AN202

This site was reported by the 1964 RBS (Hoffman 1965) and, like 13AN27, is located atop a ridge between Buck Creek and the Chariton bottomlands. The site was revealed by a washed country lane and was badly eroded at the time of the RBS survey. As with other sites along the same ridge system, the site was a generalized findspot at the time of reporting. Recommendations made in 1965 were that the site "is too thin to warrant further attention" (Hoffman 1965:26). In 1979, the site was to be tested to determine the nature of the deposit.

During the 1979 investigations, no evidence of the site was found, either by shallow shovel testing or by drilling auger holes along the present roadway. The dirt road originally reported has since been replaced by a paved two-lane access road with ditches graded at either side. The negative results of the testing and the changes in the ridgetop due to recent road construction in the area lead the author to conclude that the site has been destroyed. No further investigations are recommended since the site is assumed destroyed.

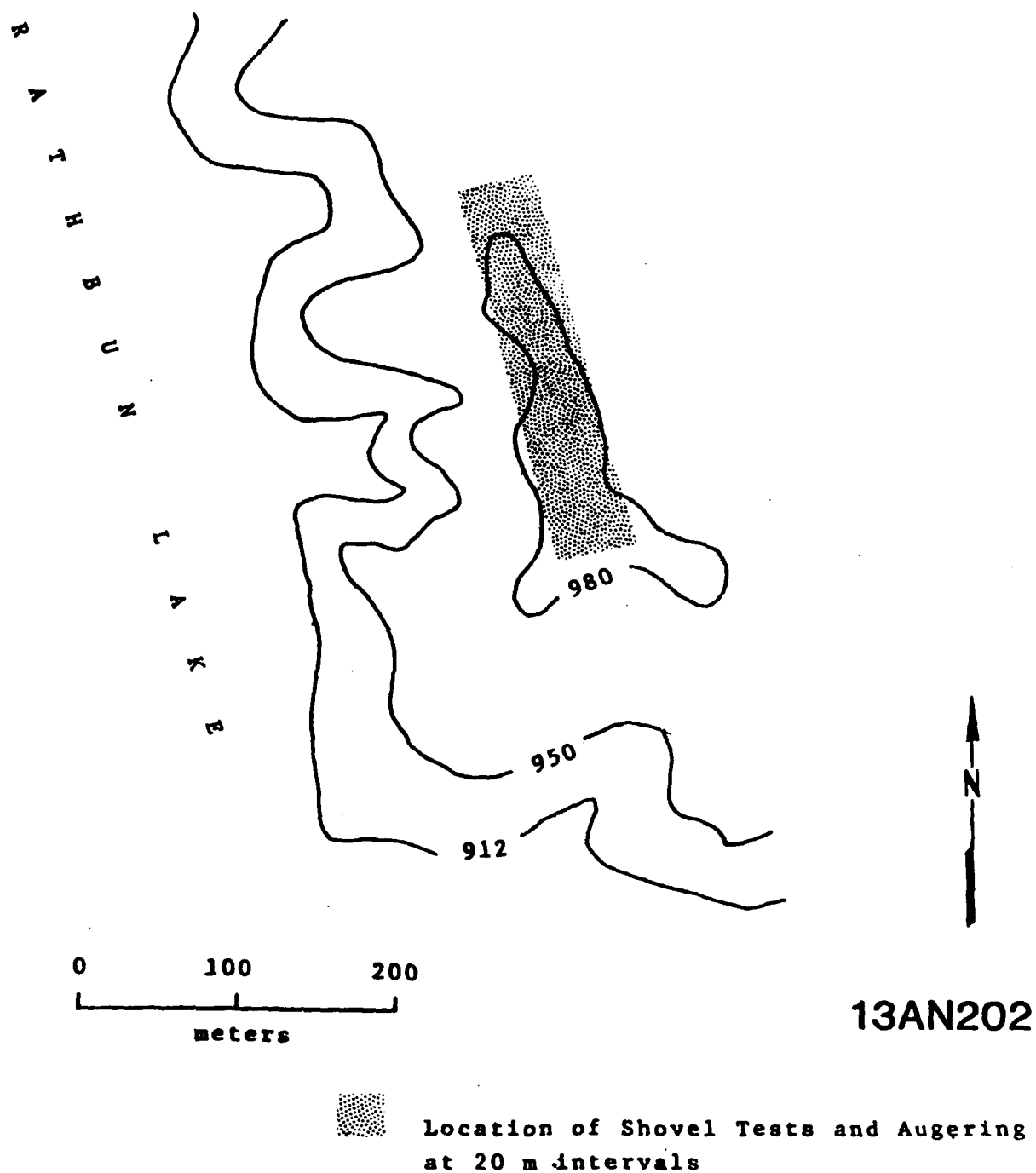


FIGURE 18. Location of Shovel Tests and Auger Holes
at 13AN202

13AN203

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	930
Type of Remains	Isolated findspot
Topography	Area below ridge on slope
Estimated Size	Isolated findspot
Surface Visibility	Moderate, grass cover
Site Condition	Badly eroded glacial outwash
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	USD61 is 200 m to the NW
Recommendations	No further investigations

13AN203

This site is an isolated findspot where a single scraper was found in association with a bone fragment in 1964. No significance was attached to the site when it was reported (Hoffman 1965:26). The site was to be tested in 1979 to determine the nature of the deposit.

Although no materials were noted on the surface of the reported location of the site, six 50 cm square tests were excavated in that location. The deepest test was excavated to a depth of 1 m below ground surface and, like other tests at the site, failed to produce evidence of cultural materials. No further investigations are recommended at the site, due to the failure to establish the presence of cultural materials there.

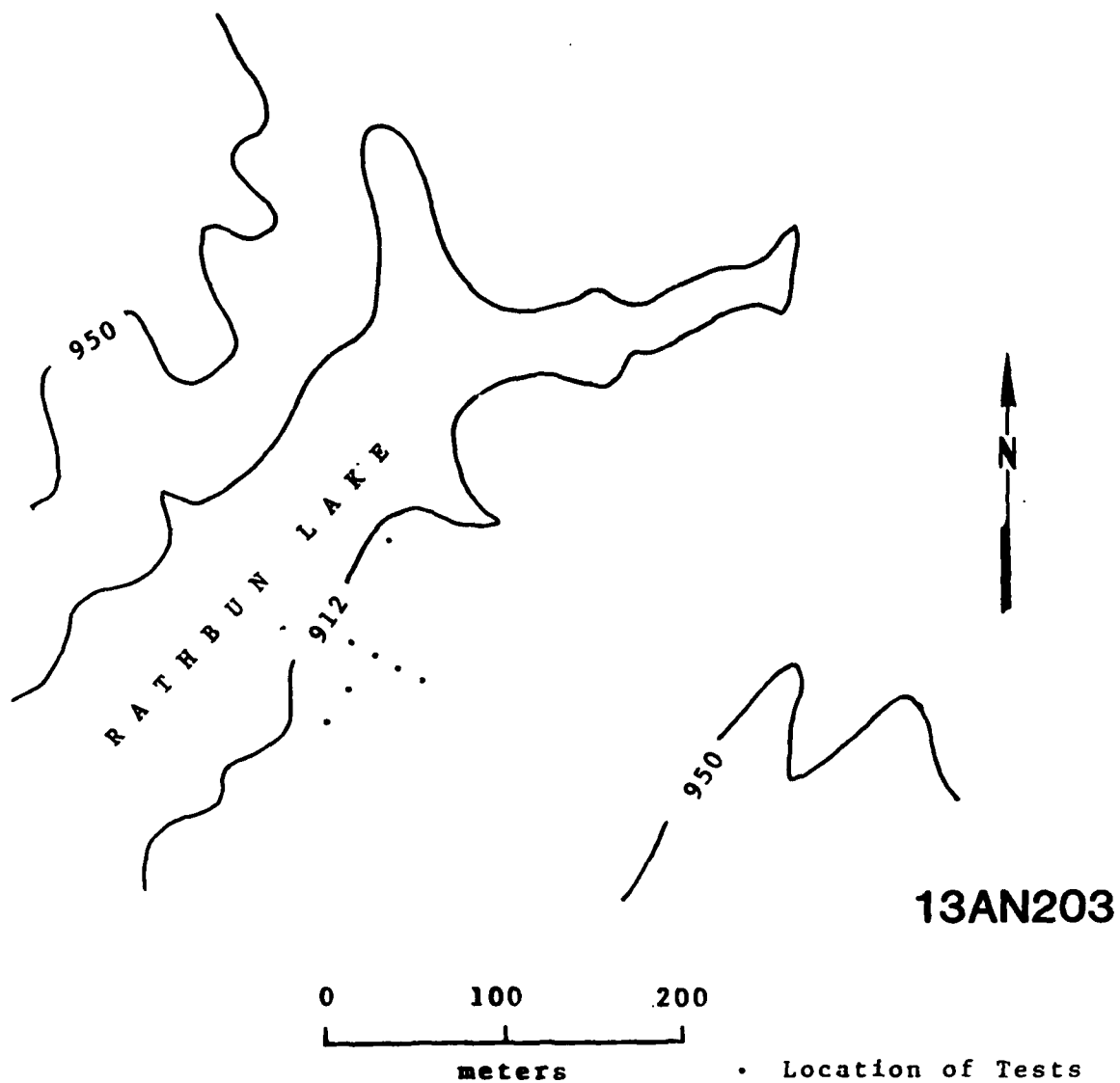


FIGURE 19. Location of Test Excavations at 13AN203

13AN205

Map Reference	USGS RUSSELL 15 min Quadrangle
Elevation	945 - 972
Type of Remains	Lithic scatter
Topography	Ridgetop
Estimated Size	Approximately 100 m x 25 m
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	USD56 is 150 m to the W
Recommendations	No further investigations

13AN205

This site was reported by Hoffman and Madison (1964) and is located on a long sloping ridge which is oriented southwest/northeast near the juncture of the two forks of the Chariton River. In 1964 lithic debris was noted scattered along an area approximately 100 m x 25 m in a plowed field on the ridgetop. Recommendations were that "The site is too thin to warrant testing and does not appear to be important" (Hoffman 1965:27). Testing was conducted in 1979 to determine the extent and character of the deposit at the site. In 1979, seven 50 cm square tests were excavated at 13AN205. The deepest test was excavated to a depth of 60 cm. A series of 1 inch cores was also taken in the area reported as the site location using an Oak Field Rod. Neither of the two methods showed any evidence of cultural materials below the immediate surface of the ground.

The seven test excavations ranged in depth from 30 to 60 cm. All fill was screened through one - quarter inch hardware cloth. No subsurface evidence of cultural activity was encountered at any level in any of the tests, therefore it must be assumed that if the site had subsurface features, they have been destroyed by erosion.

The lack of cultural materials from the surface of the site and the lack of subsurface components does not support a recommendation for further investigations there.

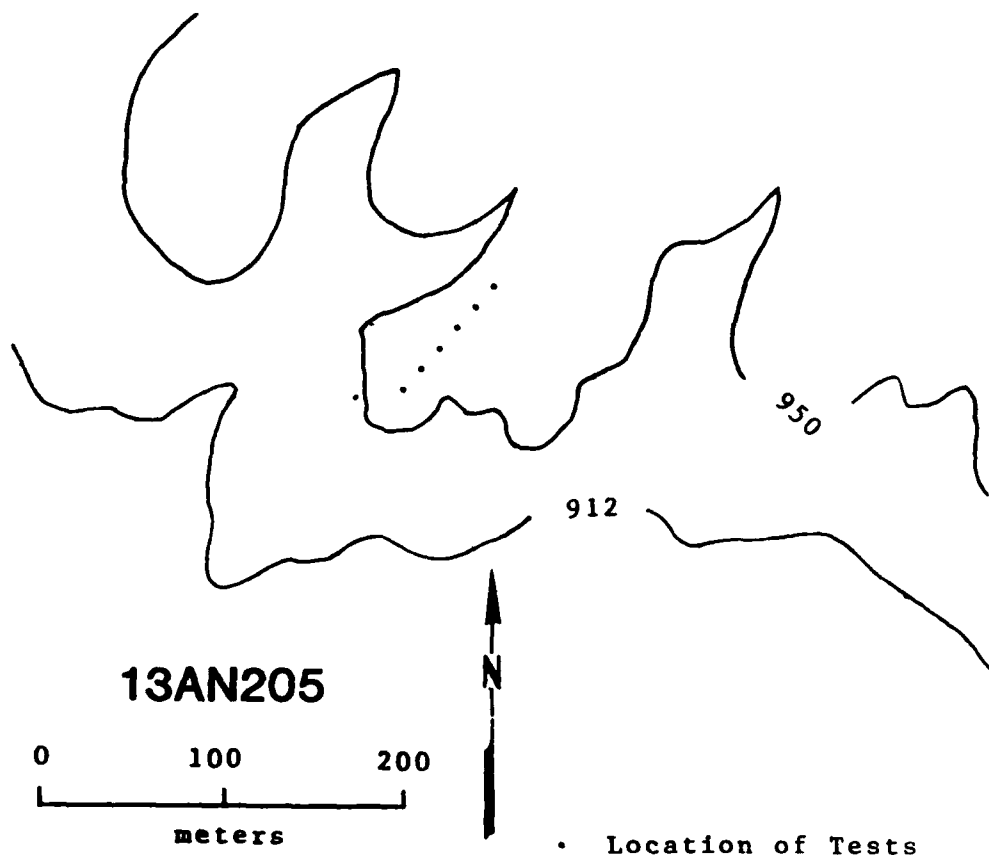


FIGURE 20. Location of Test Excavations at 13AN205

13AN206

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	960 - 970
Type of Remains	Lithic scatter
Topography	Ridge slope
Estimated Size	200 m x 60 m
Surface Visibility	Moderate cover
Site Condition	Eroded
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	USD11 is downslope 50 m to the S
Recommendations	No further investigations warranted

13AN206

This site is located on a steep north-south ridge in Honey Creek State Park approximately 200 m west of 13AN4. The RBS collected flakes from the site in 1964 and recommended that there was little "salvage potential" there (Hoffman 1965:28). Testing at the site in 1979 was directed at defining the limits of the site and the character of the deposit.

The site was tested in 1979 by means of six 50 cm tests placed at 20 m intervals in the location specified by the Iowa Site Record. No material was recovered from below the immediate surface of the ground. The lack of surface and subsurface components at 13AN206 precludes the recommendation for further recommendations there.

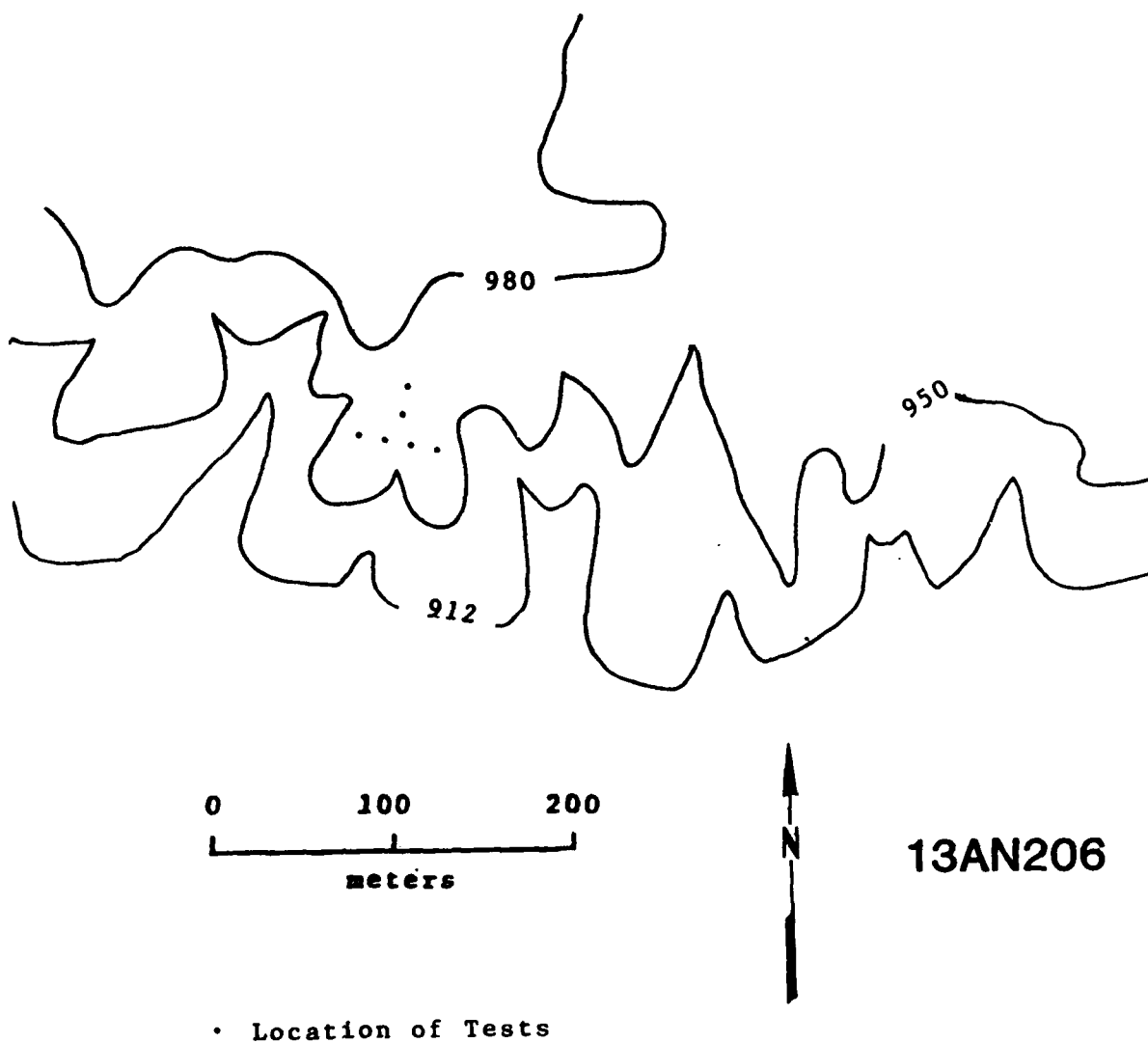


FIGURE 21. Location of Test Excavations at 13AN206

13AN207

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	940 - 950
Type of Remains	Mounds
Topography	Ridge slope
Estimated Size	300 ft x 50 ft
Surface Visibility	Moderate cover
Site Condition	Road was constructed through site destroying nearby areas
Cultural Affiliation	Woodland
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	13AN208 is 1 km to the NE
Recommendations	No further investigations warranted

13AN207 The Hawk Mound Group

Site 13AN207 is a series of three low mounds located on a bluff slope in the extreme western edge of Honey Creek Park. The low hemispherical mounds were noted by the RBS in 1964 and were tested the following year and by Brown (1967) the year after that. Presently, an access road loops through the area where the mounds were and a picnic shelter and parking lot have been built to the south of the location of the mounds. Shovel testing on both sides of the roadway and a survey of disturbed ground where the picnic shelter had been built revealed no traces of cultural materials. No surface material was collected.

Materials recovered from the site during excavations in 1965 included five lithic tools and seven body sherds. A radiocarbon date of AD 720 \pm 180 years (uncorrected) was obtained from charcoal near one of the burials (Brown 1967:9).

Grantham (nd) reports that the site has been partially destroyed by roadbuilding and that the remainder is threatened by future construction in Honey Creek State Park. Investigations in 1979 indicate that the three mounds are intact, but that the area adjacent to the mounds has been extensively disturbed by construction of the picnic shelter and the road.

Recommendations are that no further investigations are warranted at 13AN207, but that the mounds should be protected. Like 13AN1, the site is protected by Iowa law and is not recommended by the Office of the State Archaeologist of Iowa for nomination to the National register of Historic Places (Joseph Tiffany personal communication).

13AN208

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	960
Type of Remains	Mounds
Topography	Ridge slope
Estimated Size	200 ft x 200 ft
Surface Visibility	Moderate cover
Site Condition	Road was constructed through site destroying three mounds
Cultural Affiliation	Woodland
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	13AN207 is 200 m to the S
Recommendations	No further investigations

13AN208 The Overturf Mound Group

This site was reported by Hoffman (1965) as a series of four low mounds at the top of a north-south oriented ridge in what is now the western edge of Honey Creek State Park. The site is north and east of 13AN207. A road was constructed through the mounds to provide access to the lake during the past decade and presently serves as a driveway for the Park Ranger's residence. Only the disturbed traces of one of the mounds was found in the area as reported. Since Iowa law forbids the disturbance of prehistoric burials, shovel testing was conducted in the area nearby to determine if cultural materials were present in the site fill; testing in the area yielded no cultural materials. A check of nearby erosional features also failed to produce evidence of cultural materials.

Recommendations for this site are that no further investigations are warranted. Little remains of the single mound to the north of the roadway and all of the other mounds were destroyed during construction of the road. Since the remaining mound is between two roads, it is impossible to identify which of the mounds reported by Hoffman (1965) it represents. The site is protected by Iowa laws which provide penalties for the disturbance of ancient burials.

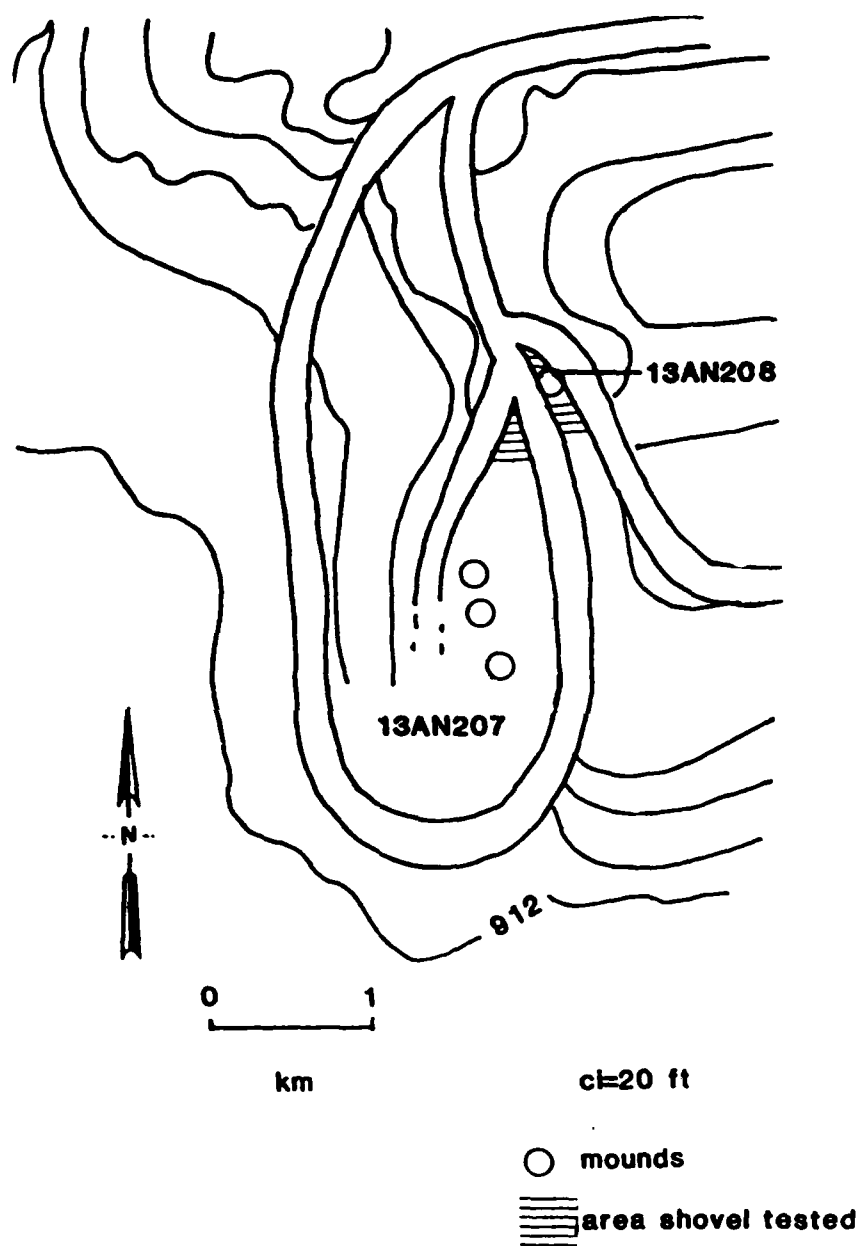


FIGURE 23. Location of Shovel Tests at 13AN208

13AN207 and 13AN208

Each of these two mound groups is located at the western end of Honey Creek State Park in an area which has been the focus of extensive construction since the filing of the original site reports in 1964 (Hoffman 1964). The two sites occupy the western and eastern edges of a north - south trending peninsula. A residence and access road have been constructed on the eastern edge of the peninsula where 13AN208 is located. The road has destroyed all but one of the mounds and has removed much of it. There were none of the four other mounds reported in 1964 (Hoffman 1965) remaining in the group at 13AN208. To the southwest, a picnic shelter has been constructed at the western edge of the peninsula. The shelter is adjacent to 13AN207. The three mounds reported for this site have not been destroyed, but the surrounding area has been extensively disturbed by the construction of the picnic shelter and parking lot. Evidence of earlier excavations by Brown (1967) are evident as a linear depression on the northernmost and southernmost mounds (Mound 3 and Mound 1) at 13AN207 .

Since the mounds were extensively tested in the past, shovel testing and screening was conducted in the areas nearby to determine if evidence of occupational debris was present there. Roadcuts, freshly scraped construction areas, erosional features, and cutbanks in the vicinity of the two mound groups were investigated to determine if subsurface materials were present there. No materials were found on the surface or below ground near either of the sites. In 1982, personnel from the Archaeology Laboratory at the University of South Dakota returned to Honey Creek State Park to determine if additional construction activities had taken place there and to determine if findspots along the shoreline had produced additional materials. Water levels were too high to reinvestigate findspots, but the area where 13AN207 and 13AN208 are located was found to be little changed from that noted in 1979.

THE HULL SITE (13LC1)

Map Reference	USGS
Elevation	935 - 962
Type of Remains	Artifact scatter
Topography	Knolltop, terrace remnant
Estimated Size	200 ft x 100 ft
Surface Visibility	Part of site under cultivation
Site Condition	Lacks depth
Cultural Affiliation	Woodland
Investigations	Survey, testing
Materials Collected	71 flakes, 2 bifaces, 1 sherd
Nearest Site or Findspot	13LC2 is 200 m to the S
Recommendations	No further investigations warranted

THE HULL SITE (13LC1)

This site was recorded during the McKusick and Ries survey (1962). The site is on the extreme western end of the north fork of the reservoir and is located on a knoll above the Chariton River on the north shore. Hoffman and Madison (1964) report this site as a habitation measuring 200 ft by 100 ft. Brown (1967:22) tested the site in 1965 with a series of 5 ft squares placed over the main distribution of debris. He reported at that time that, although a few specimens were present below the plow zone at the site, no further investigation was recommended. Grantham (nd) assigns a Woodland affiliation to the site, based on the presence of grit-tempered ceramics collected during the McKusick and Ries survey in 1962.

The site was tested during the 1979 investigations in the reservoir area to determine if it qualifies for nomination to the National Register of Historic Places. Seven tests were excavated at 13LC1; tests were 50 cm squares placed at 20 m intervals over the main surface scatter noted at the site. Artifacts were noted below the level of the plow zone in only one of the tests and were found to be limited to the upper 24 cm of the site. A cutbank, which is adjacent to the site on the south, was faced with shovels and the profile noted. Stratigraphy was found to be similar to that defined by Brown (1967) for all the 1979 tests. Based on the results of testing of 13LC1, it is recommended that no further investigations be conducted there.

ARTIFACTS

Bifaces:

Two bases of bifacially flaked tools were recovered from the surface of this findspot. The first specimen has a square base and is made of white chert. It is 27.3 mm in length, 31 mm in width, and is 7 mm in thickness. The second specimen is a rounded basal fragment made of gray chert. It is 17.8 mm in length, 28.1 mm in width, and 9.2 mm in thickness.

Ceramics:

A single grit-tempered sherd 17 mm in length was found on the surface of this site. It is 7.5 mm thick with temper particles up to 4 mm in size.

MATERIALS RECOVERED FROM EXCAVATIONS

The only subsurface cultural material recovered from this site is a small flake from Test 1 which was 12 cm below the surface and a flake 10 mm in length which was encountered in Test 6 at a depth of 26 cm below the surface.

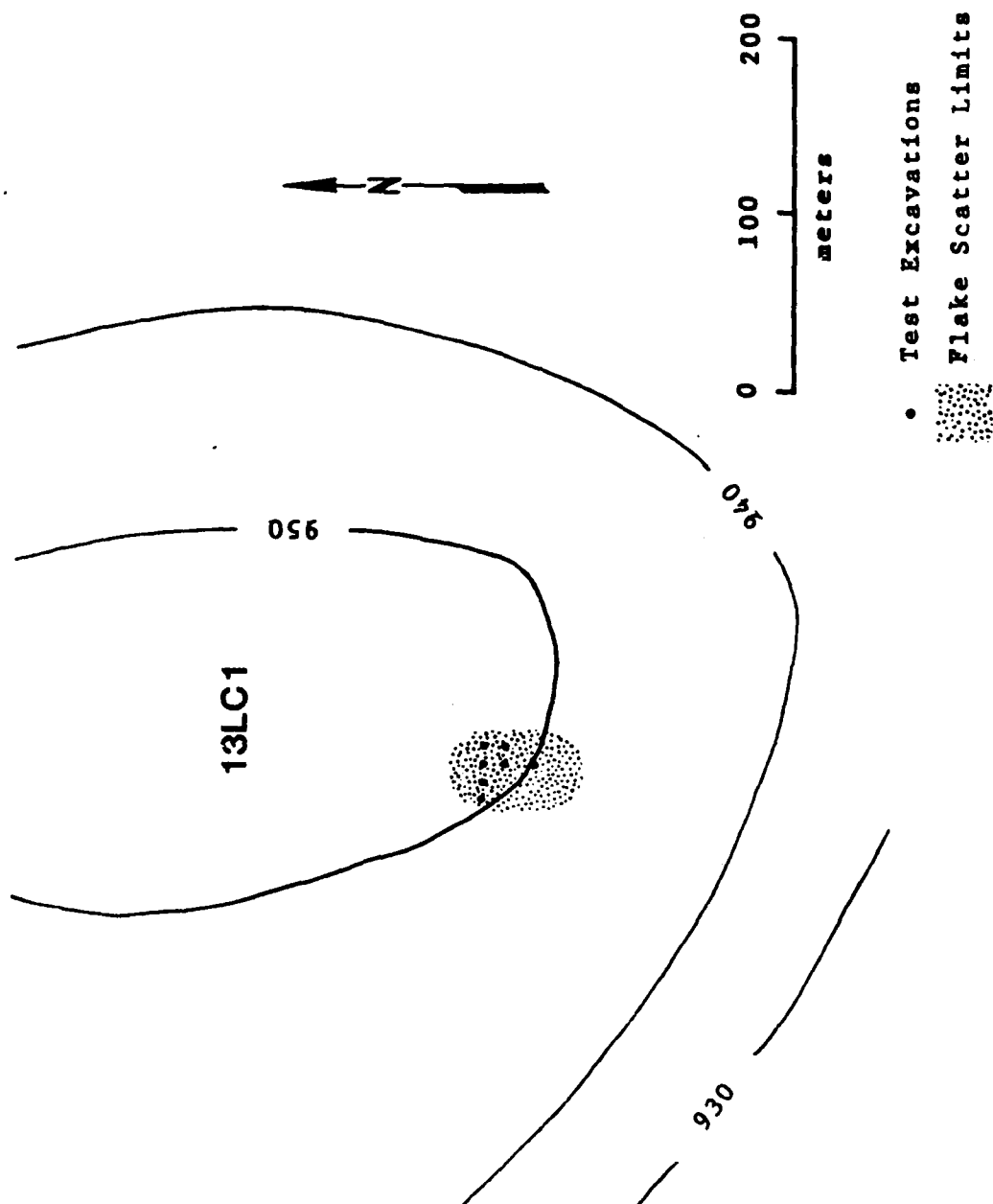


FIGURE 24. Location of Test Excavations at 13LC1

13LC7

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	930 - 965
Type of Remains	Artifact scatter
Topography	Ridgetop
Estimated Size	Unknown
Surface Visibility	Site under cultivation
Site Condition	Destroyed
Cultural Affiliation	Woodland
Investigations	Survey, testing
Materials Collected	28 flakes, 2 bifaces
Nearest Site or	
Findspot	13LC6 is 800 m to the N
Recommendations	No further investigations

13LC7

This site is one of nine reported in 1962 at the western end of the north fork of Rathbun Reservoir area but for unknown reasons, was not reported in the summary of sites in the McKusick and Ries (1962) publication. The reported lithic scatter is situated along the eroded edge of a field road between the 930 ft and 965 ft contour intervals, but was not visited by Ries. Presently, the reported location is on private land. This site is one of many investigated during the 1979 field season which had been minimally reported; reports were based on information supplied by informants and the location has never been verified. The existence of the site was confirmed during the 1979 investigations; a thin lithic scatter was noted in the specified location.

Seven 50 cm test squares were placed at 20 m intervals in and near the area of the site where artifacts were found on the surface. One test was excavated to a depth of 1 m below ground surface. No subsurface materials were found below 15 cm. No further investigations are recommended since no subsurface remains were detected during testing.]

ARTIFACTS

Bifaces:

Two tips of bifacial tools were recovered from the surface of

this site. The first specimen is of tan chert and is pointed. It is 42.1 mm in length, 53.2 mm in width, and 11.2 mm in thickness. The second specimen converges to a rounded end and is of white chert. It measures 46.8 mm in length, 31.5 mm in width, and 12 mm in thickness

MATERIALS RECOVERED FROM EXCAVATIONS

The only subsurface cultural materials recovered from this site are two small flakes from Test 4 which were at a depth of 15 cm.



FIGURE 25. Location of Test Excavations at 13LC7

13WE4

Map Reference	USGS
Elevation	900 - 910
Type of Remains	Artifact scatter
Topography	Floodplain of the south fork
Estimated Size	Unknown
Surface Visibility	Excellent
Site Condition	Doubtful if site existed
Cultural Affiliation	Unknown
Investigations	Survey, testing
Materials Collected	None
Nearest Site or Findspot	13WE2 is to the W
Recommendations	No further investigations warranted

13WE4

This site was reported in 1962 as being 100 ft south of the Chariton River between a stream and a bluff south of the location (Ebel 1962). As with other of the sites in the reservoir area reported during the 1962 investigations, the recorded location of this site was not based on first-hand knowledge of the survey crew. An informant reported the location to the McKusick and Ries surveyors who reported the information without verification. Although portions of the site would have been above water during the summer of 1979, no evidence for the site was found in the area designated by the Iowa Survey Record, nor have any materials ever been collected from the location. Shovel testing in the area failed to indicate that materials had been buried since the 1962 survey.

No materials were recovered from the surface or from testing at this site during the 1979 investigations in the reservoir area, therefore no further investigations are recommended.

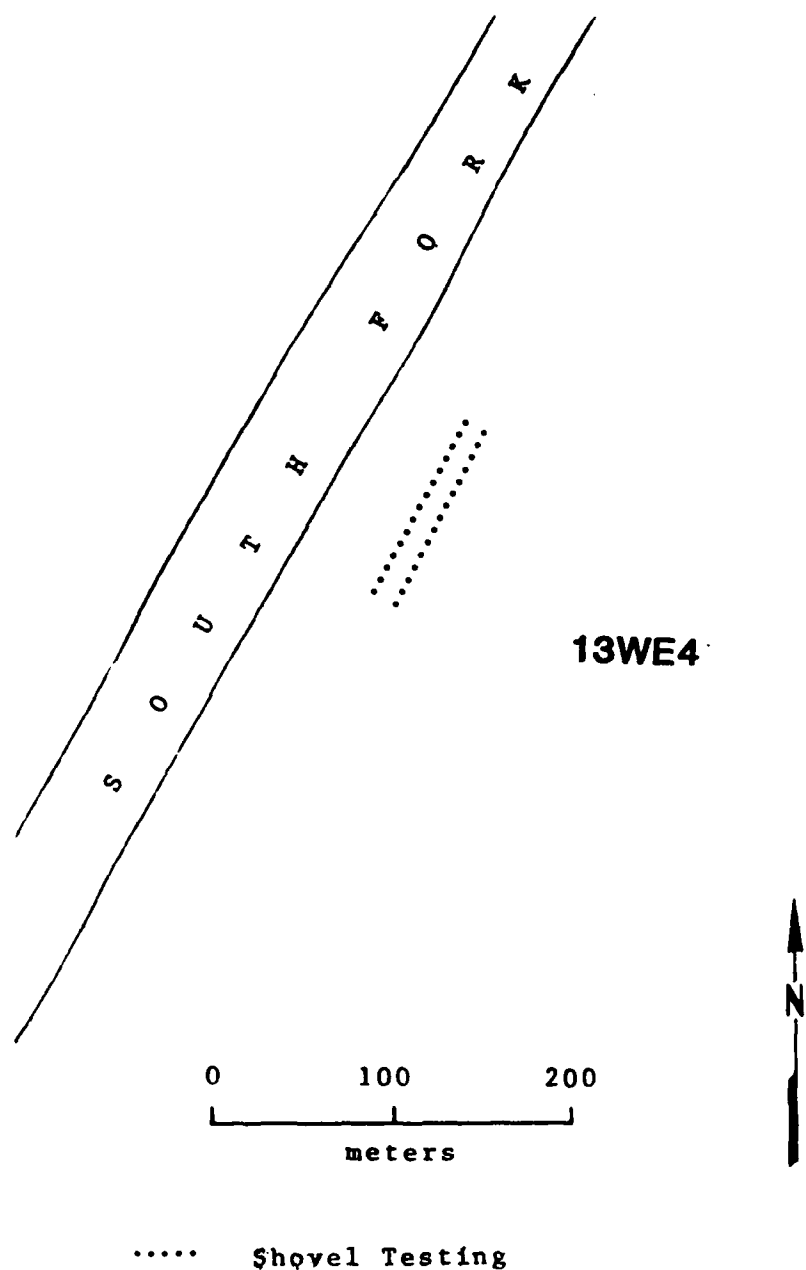


FIGURE 26. Location of Test Excavations at 13WE4

13WE6

Map Reference	USGS
Elevation	900 - 910
Type of Remains	Artifact scatter
Topography	Blufftop near roadcut
Estimated Size	Not reported
Surface Viability	Excellent, in cultivation
Site Condition	No subsurface materials
Cultural Affiliation	Woodland
Investigations	Survey, shovel testing
Materials Collected	10 flakes, 11 chunks
Nearest Site or Findspot	13WE7 and 13WE8 are to the W
Recommendations	No further investigations

13WE6

This site is located at the extreme western end of the south fork of the reservoir. Reported in 1962, the site is outside Corps of Engineers' property on a blufftop at an elevation of 1000 ft. The existence of a site adjacent to a roadcut was verified by an RBS crew in the area in 1964. A surface scatter of lithic debris presently marks the location of the site, although there is no apparent concentration of materials in the field. A Woodland affiliation assigned to the site is based on the presence of a single small grit-tempered sherd. Shovel testing in the area of the roadcut failed to indicate that the site has undisturbed subsurface components.

Although a thin scatter of materials appears on the surface of this site, no subsurface materials were found. On the basis of materials collected, no further investigations are recommended.

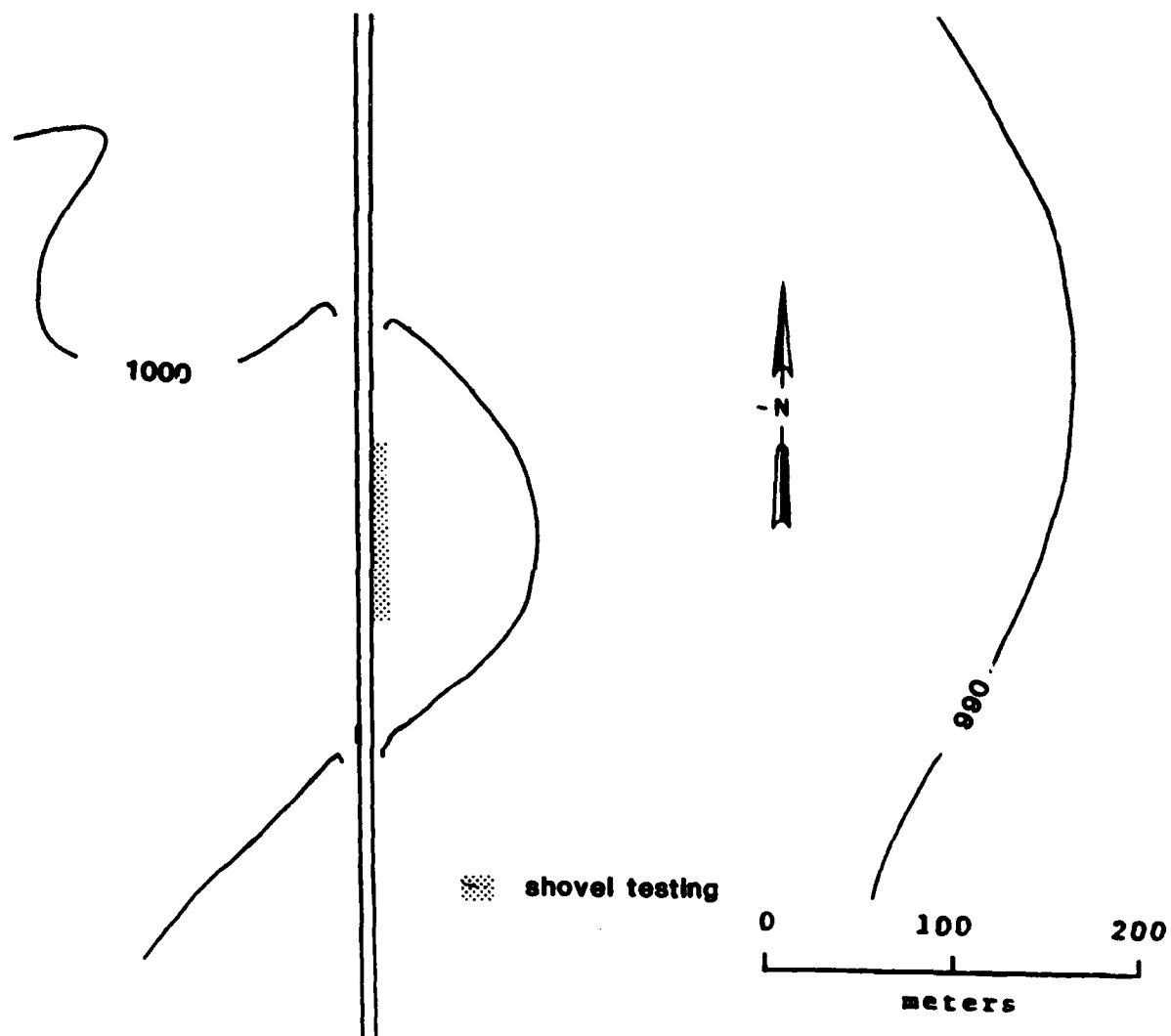


FIGURE 27. Location of shovel Testing at 13WE6

13WE12

Map Reference	USGS
Elevation	940
Type of Remains	Artifact scatter
Topography	Ridgetop
Estimated Size	Not reported
Surface Visibility	Fair, eroded slope surface
Site Condition	No subsurface materials
Cultural Affiliation	Unknown
Investigations	Survey, shovel testing
Materials Collected	1 flake
Nearest Site or	
Findspot	13WE7 and 13WE8 to the W
Recommendations	No further investigations

13WE12

This site was first reported in 1962 as a thin scatter of lithic debris along a ridge north of the Chariton River at the 940 ft contour. This site was not verified by the RBS field crew in 1964. Since that time, a limestone quarry has been in operation and subsequently abandoned at the designated location. Shovel testing and examination of erosional features in fields adjacent that specified by the Iowa Site Records failed to indicate any materials either on or below the ground surface. A single flake was collected north of the abandoned quarry. The site is assumed to have been destroyed.

MATERIALS RECOVERED FROM EXCAVATIONS

The single flake from this location is the only cultural material which was found either on the surface or in the shovel tests. Since only a single flake was recovered, no further investigations are recommended.

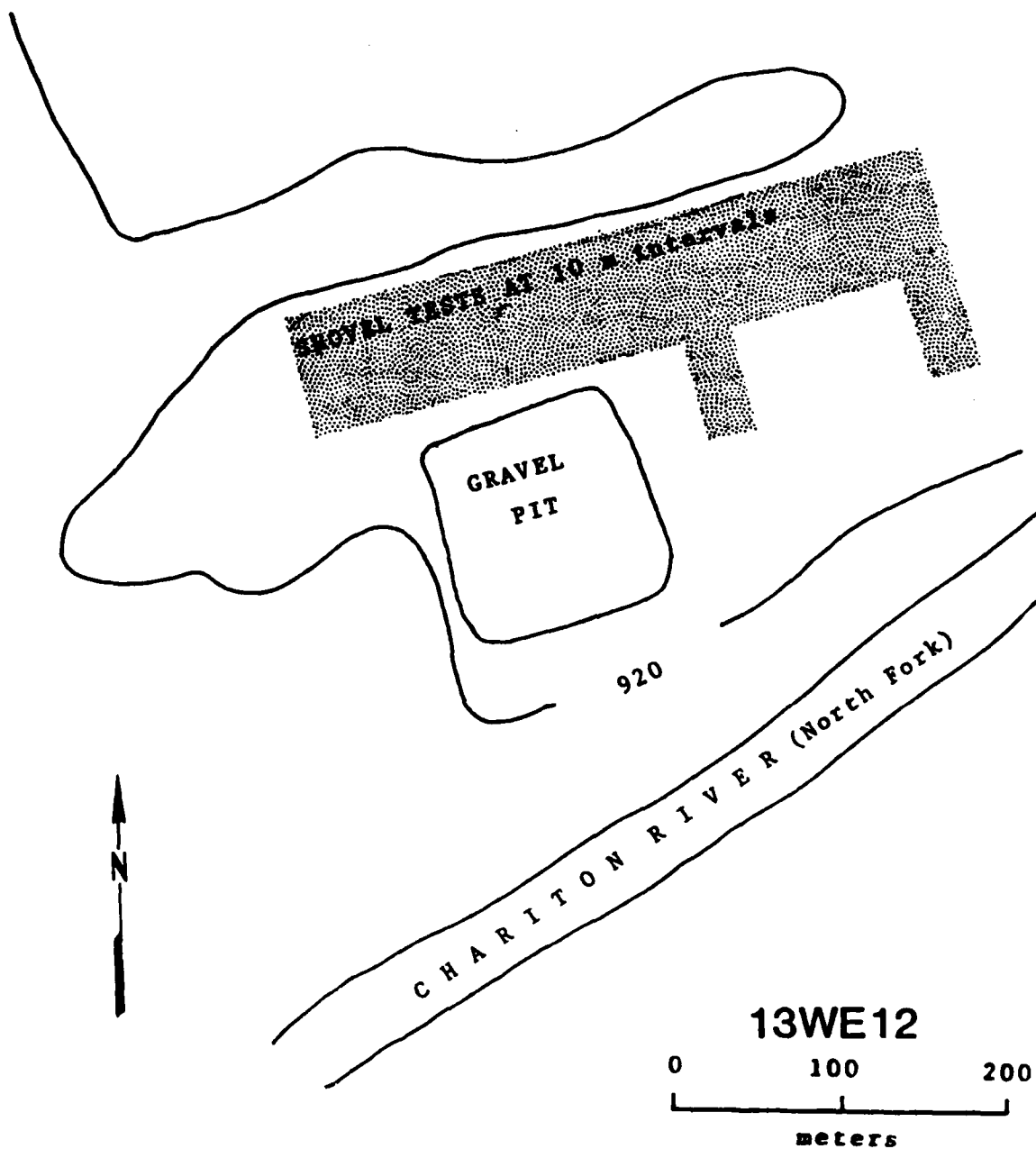


FIGURE 28. Location of Shovel Testing at 13WE12

SUMMARY

There was an almost complete lack of subsurface data from the 31 previously recorded sites which were tested during the 1979 investigations at Rathbun Reservoir. This is not surprising, since recommendations for all but the 4 mound sites and two others to be tested had been that "no further investigations" were required (Hoffman 1965; Weichman 1976b). The overall impression of archaeological deposits in the reservoir area is that they are presently quite thin. Even if any of the deposits were substantial at one time, they have since been destroyed by erosion. No trace presently exists for sites such as 13AN25 and 13AN9 which were reported in the early 1960's or earlier. The locations of many of the previously reported sites could not be established during the 1979 investigations and by investigations over a decade earlier (Hoffman 1965). When the locations of previously recorded sites could be established with certainty, they lacked depth. A minimum of six test units 50 cm square were excavated at the locations of previously recorded sites.

As a consequence of finding no subsurface materials at the tested sites, there is no independent data base to use to verify hypotheses generated as a consequence of the shoreline survey.

**PART II.
INTENSIVE SHORELINE SURVEY
INTRODUCTION**

One hundred and four findspots were recorded along the shoreline between the Rathbun reservoir dam site and the Lucas / Monroe County line during the 1979 investigations in the Rathbun Reservoir area. Shoreline findspots where more than 100 items of material culture were found are rare and comprise only 12 percent of the total number. Visibility was excellent due to a low lake level which had exposed beaches devoid of vegetation as much as 12 m wide in some places. All of the shoreline findspots were atop the surface of a compact yellow matrix which had been defined during testing of previously recorded sites. The yellow material was found to underlie cultural deposits in all instances. The yellow layer appears below the subsoil which underlies Lindley and Weller series soils in the reservoir area. In many places along the shoreline, wave action had cut benches through the removal of overburden, from a few centimeters to up to 30 m. The exposed cutbanks isolated at the rear of many of the beaches indicate the amount of material which has been removed from the shorelines. If cultural remains had been located in any of these areas, they have long since been destroyed by wave action. The overburden which was removed from shoreline benches by wave action may be the source of cultural materials which appear as isolated findspots along shorelines. Materials collected from many of the findspots on the north shore of the lake appear on beaches which are located downslope from previously recorded sites and may represent the results of erosion and redeposition.

METHODS OF INVESTIGATION

SURVEY METHODS:

All segments of the shoreline survey during the 1979 field season in Rathbun Reservoir were conducted by a field crew of at least four individuals walking at 2 m intervals along the exposed beach. All cultural materials encountered along shorelines were collected and their horizontal extent recorded. The rationalization for collecting all materials from beaches is provided by the fact that in times of high water, any materials along the beaches are either disturbed or removed. All cultural materials thus encountered were collected and their location recorded as a "findspot." Largely in reaction to the indiscriminant assignment of site numbers to ephemeral deposits in the past, during 1979, site numbers were reserved for locations where more than 100 items had been found. A further rationale for this decision is provided by evidence for the mobility of cultural materials, especially flakes, which were often noted during the shoreline reconnaissance washing onto the beach by wave action. Many of the sherds which were collected from beach findspots exhibit evidence for having been moved about as is shown by their rounded edges and "rolled" appearances.

At some findspots along the Rathbun Reservoir beaches, findspot locations are at elevations lower than previously reported sites, suggesting that materials may have been shifted downslope as colluvium. This topic is presented in the following sections in more precise terms.

FINDSPOT TESTING:

In instances where findspots were tested to determine their subsurface extent or character, three different means of excavation were employed: 50 cm square "telephone booths" excavated to depths of up to 1 m, shovel testing of the upper 30 cm of the ground surface, and power auger holes drilled to 1 m in depth. Tests were spaced at 15 to 20 m intervals over areas defined by surface scatters of artifacts at tested findspots. The fill from all test pits was screened through one-quarter inch hardware cloth using "shaker screens". Shovel testing was conducted at many of the findspots as a rapid means for assessing the subsurface character of the deposits. This type of test was simply a series of tests up to 30 cm in size which were placed in the boundaries of artifact scatters. Shovel tests were excavated with either a small shovel or a trowel. Fill from shovel tests was not usually screened.

Auger holes were drilled with a power auger with an 8 inch bit. Fill from these tests was generally quite fine in texture and was examined either by screening or by troweling. An Oak Field Rod was also used to test findspots. This method removed 1 inch cores from findspots which could be cross-sectioned and visually examined.

Although a variety of testing techniques was employed to evaluate the subsurface character of findspots at Rathbun reservoir, no tested shoreline findspot produced other than a trace of cultural debris from subsurface contexts. This was found to be the case for even the most extensive surface deposits. The results of findspot testing are compatible with those obtained by testing a series of previously recorded findspots in the reservoir area.

LABORATORY METHODS

Specimens collected from shoreline findspots were placed in paper bags marked with locational data, the date, surveyor's initials, and a temporary findspot number. The artifacts collected were processed in the field laboratory daily. Tools and ceramics were washed, briefly described and measured with the information placed on catalog cards. Each artifact was permanently marked with the findspot number from which they had been removed. Flakes were washed, counted and placed in storage boxes or bags marked with their findspot number and the date collected. All storage containers for materials collected during the 1979 Rathbun Reservoir investigations were marked "PROPERTY OF CORPS

OF ENGINEERS KANSAS CITY DISTRICT".

Daily plots of new findspot information were placed on maps to allow for cross checking of data against the data previously collected during 1979 and from earlier investigations.

SHORELINE SURVEY

Surface finds of artifacts from shoreline findspots and nearby upland sites are discontinuous; there is no clear pattern of materials grading from one location into the other. The extent that erosion of upland sites and their redeposition as colluvium at lower elevations along the shorelines is responsible for isolated findspots and findspots with very few artifacts is not known. Plots of previously recorded upland sites and shoreline findspots do not lend support to this conclusion, however, since the expected pattern is not evident. Some evidence exists, however, in support of wave action as an agent of transport of artifacts, at some findspot locations, small flakes were found in recent wave deposited material intermixed with modern debris, indicating redeposition. In some instances, small flakes were noted as they were being washed ashore by wave action. Ceramic materials from shoreline findspots show further evidence for having been transported either as colluvium or by wave action; many sherds have rounded edges or eroded interior and exterior surfaces which may be the result of abrasion due to transportation. However, plots of inundated findspots and shoreline findspots show no relationship between the locations of the two types of remains. The negative results obtained from testing shoreline findspots also suggests that the materials noted along the lake shoreline are restricted to the surface of beaches and that artifact bearing deposits do not underlie them. Further, no features such as stone-lined hearths which were recorded at sites such as 13AN52 (Benn and Hovde 1979) or charcoal concentrations such as has been reported at 13AN3 were found along the 155 miles of shoreline which were surveyed during the 1979 investigations. The following arguments support the conclusion that some, but not all, of the material collected along the beaches and shoreline of Rathbun Reservoir during the 1979 investigations is the result of erosion and deposition.

1. Although features such as hearths have been defined at other sites in the reservoir area (Benn and Hovde 1979), none were found along the 180 miles of shoreline which was surveyed.
2. None of the shoreline findspots or the 31 previously recorded sites which were tested showed evidence of subsurface deposits. Although some findspots consisted of substantial scatters of artifacts and debris, when tested, they produced little or no materials from levels below the immediate ground surface.

3. Most of the ceramic sample collected from the shoreline findspots shows evidence which could be interpreted as the result of transport either downslope as colluvium or through wave action from sites at lower elevations. Sherds from the shoreline of the reservoir generally are small in size and exhibit a "rolled" appearance.

4. The beaches of most of the reservoir area are shelf-like and are the result of erosion by wave action of the upper surface of terraces and bluff slopes. The ground surface from a few centimeters up to 30 m has been removed along the shoreline of the reservoir. The yellow matrix encountered along most of the beaches was encountered during testing of non-shoreline or upland sites at a depth below that where artifacts were recovered, such as at 13AN1. Erosion of archaeological deposits is not uncommon at other sites in the reservoir area; it is reported to have destroyed site 13AN52 (Benn and Hovde 1979).

ISOLATED FINDSPOTS:

Sixteen of the 104 shoreline findspots at Rathbun Lake are occurrences of single artifacts. Of these, 11 are isolated finds of flakes and 5 are finds of single tools recovered from locations where no associated artifacts were noted. No apparent patterning was noted in the locations of isolated findspots. Isolated finds were recorded in all parts of the reservoir including Buck and Honey Creek shorelines, the shoreline of both the north and south forks, and the shoreline of the main body of the lake. The table presented below provides the location and type of artifact recovered from each of the isolated shoreline findspots recorded during 1979 at Rathbun Reservoir.

TABLE II.
ISOLATED FINDSPOT MATERIALS AND LOCATIONS

Findspot	Materials	Location
USD2	1 flake	Buck Creek
USD6	1 flake	Buck Creek
USD8	1 flake	Buck Creek
USD11	1 flake	Honey Creek
USD13	1 proj point	Honey Creek
USD19	1 flake	Main Body
USD23	1 lithic tool	Main Body
USD27	1 flake	Main Body
USD28	1 flake	Main Body
USD31	1 ground axe	south fork
USD65	1 lithic tool	south fork
USD75	1 flake	south fork
USD86	1 flake	north fork
USD92	1 lithic tool	north fork
USD103	1 flake	north fork
USD105	1 flake	north fork

Recommendations for the 16 isolated findspots are that no further investigations are warranted since quantities of materials from each are too limited.

USD2

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated findspot
Present Topography	Clay beach
Original Topography	Juncture of Buck Branch and tributary
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 large flake
Sites or Findspots within 400 m	USD9
Recommendations	No further investigations

This findspot is located at the mouth of a small cove which was once the valley of a tributary stream of Buck Branch. Buck Creek cove is to the west. Since only a single flake was recovered, no additional investigations are recommended.

USD6

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated findspot
Present Topography	Clay beach
Original Topography	Edge of Buck Branch valley
Estimated Size	Isolated Findspot
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	USD7, USD8
Recommendations	No further investigations

This findspot is located on the north side of a small cove on the west shoreline of Buck Creek cove. The single flake from this findspot does not support a recommendation for additional investigations there.

USD6

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Isolated findspot
Present Topography	Clay beach
Original Topography	Edge of Buck Branch valley
Estimated Size	Isolated find
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	USD6, USD7
Recommendations	No further investigations

This findspot is located on the west side of Buck Creek cove on open shoreline. Since only a single artifact was recovered from this findspot, no additional investigations are recommended.

USD11

Map Reference	USGS HYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Isolated find
Present Topography	Clay beach
Original Topography	Edge of the Chariton valley
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	USD12, 13AN1, 13AN3, 13AN4, 13AN206
Recommendations	No further investigations

This findspot is located on the east side of a small cove on the south shoreline of Honey Creek State Park. The single flake recovered from this findspot does not support a recommendation for further investigations.

USD13

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Isolated find
Present Topography	Clay beach
Original Topography	Edge of valley joining Chariton valley
Estimated Size	Single artifact
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 projectile point
Sites or Findspots within 400 m	USD14
Recommendations	No further investigations

This findspot is on the west side and at the mouth of a small cove on the south shoreline of Honey Creek State Park. The single artifact from this findspot does not support a recommendation for additional investigations.

ARTIFACTS**Projectile Point:**

A nearly complete deeply corner notched point was recovered from USD13 (Figure 29a). The specimen is banded white and brown chert and measures 38.5 cm in length, 33.6 mm in width, and 5.9 mm in thickness.

USD19

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Isolated find
Present Topography	Clay Beach
Original Topography	Uplands at the edge of a branch of a Chariton River tributary
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	USD20
Recommendations	No further investigations

This findspot is on the east side of a cove on the south shore of the reservoir in Island View Area. Since only a single flake was recovered from this findspot, no further investigations are recommended.

USD23

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated findspot
Present Topography	Clay Beach
Original Topography	At the edge of the valley of the north fork of the Chariton River
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 endscraper
Sites or Findspots within 400 m	USD22
Recommendations	No further investigations

This findspot is on a point of land to the east of USD22. Since only a single artifact was recovered from the site no further investigations are recommended.

ARTIFACTS

End Scrapers:

A white chert endscraper from this findspot has retouch which continues along one of the lateral margins forming a convex line. The specimen measures 26.7 mm in length, 19.7 mm in width, and 11 mm in thickness.

USD27

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Isolated find
Present Topography	Clay Beach
Original Topography	End of a point of land between two tributary valleys along main Chariton River valley
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	USD28, USD29
Recommendations	No further investigations

This findspot is located on the east shoreline of a large cove which divides Rolling Cove Area in half. Since only a single flake was recovered from this findspot no further investigations are recommended.

USD28

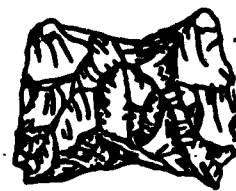
Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Isolated find
Present Topography	Clay Beach
Original Topography	End of a point of land between two tributary valleys along main Chariton River valley
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	USD27, USD29
Recommendations	No further investigations

Like USD27, this findspot is represented by only a single find. Since only a single artifact was recovered from the surface of this findspot, no further investigations are recommended.



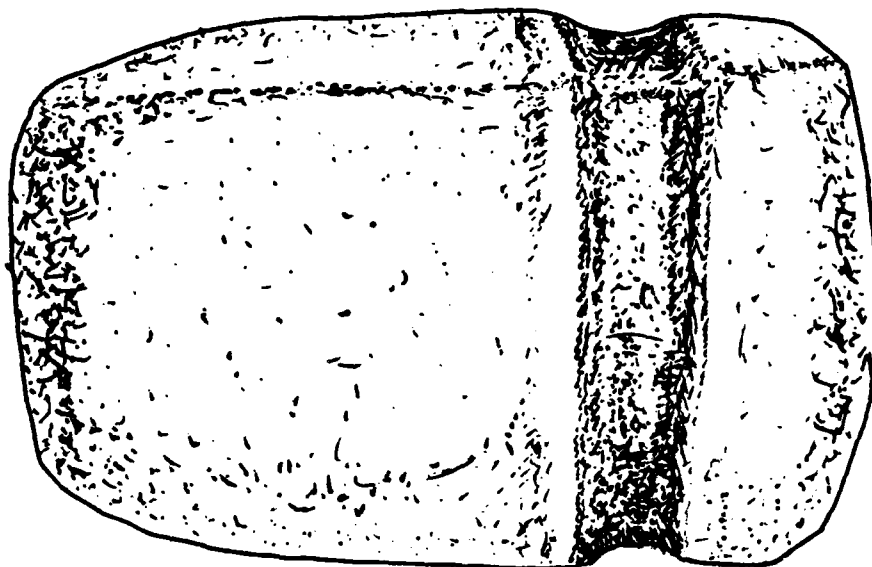
a

USD13



b

USD65



c

USD31

Illustrated full size

FIGURE 29. Artifacts Recovered from Isolated Shoreline Findspots

USD31

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated Findspot
Present Topography	Clay Beach
Original Topography	Near the mouth of Jackson Branch where it joins the south fork of the Chariton river
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface at shoreline
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected Sites or Findspots within 400 m	1 ground stone axe 13AN31
Recommendations	No further investigations

This findspot is located on the west side of a small cove on the south shoreline of the south fork of the reservoir. The single item recovered from this findspot does not warrant a recommendation supporting additional investigations.

ARTIFACTS

Ground Stone Axe:

A full-grooved ground stone axe (Figure 29c) was found at the waterline at this findspot. The axe is pitted overall and is pitted on the poll and bit end. The specimen measures 116 mm in length, 75.5 mm in width, and 37 mm in thickness.

USD65

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated find
Present Topography	Clay Beach
Original Topography	Edge of a tributary valley where it adjoins that of the south fork of the Chariton River
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 biface fragment
Sites or Findspots within 400 m	USD66,
Recommendations	No further investigations

This findspot is located near the confluence of the north and south forks of the reservoir. Since only a single artifact was recovered from this findspot, no further investigations are recommended.

ARTIFACT

Biface:

A medial fragment of a biface or projectile point with convex margins (Figure 29b) was collected from this findspot. The specimen is of light gray chert and measures 23.8 mm in length, 29.2 mm in width, and 8.5 mm in thickness.

USD75

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated find
Present Topography	Clay Beach
Original Topography	At the north edge of the south fork of the Chariton River.
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	USD74, USD76
Recommendations	No further investigations

Since only a single flake was recovered from this findspot, no further investigations are warranted

USD86

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of Buck Creek valley between two tributary streams
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is situated on the east side of the Buck Creek valley. Based on the single item recovered, no further investigations are recommended.

USD92

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Isolated findspot
Present Topography	Clay Beach
Original Topography	End of a point of land extending into the floodplain of the north fork of the Chariton River
Estimated Size	Isolated findspot
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 biface
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is near the end of a point of land which extends from the south shoreline of the north fork of the reservoir.

ARTIFACT

Biface:

One biface recovered from this findspot has a remnant of a striking platform on the basal end indicating that it was originally a flake. The specimen has a rounded base and is white and gray chert. The specimen measures 38.2 mm in length, 35.3 mm in width, and is 18.3 mm in thickness.

USD103

Map Reference	USGS RUSSELL 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated findspot
Present Topography	Ridge north of the reservoir
Original Topography	Ridge north of the valley of the north fork of the Chariton River
Estimated Size	Isolated findspot
Surface Visibility	Vegetation cover is heavy
Findspot Condition	Pasture
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot was found on a ridge north of the shoreline of the north fork of the reservoir. Materials are too few to warrant additional investigations.

USD105

Map Reference	USGS RUSSELL 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated findspot
Present Topography	Clay Beach
Original Topography	Edge of the valley of the north fork of Chariton River
Estimated Size	Isolated find
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake
Sites or Findspots within 400 m	13AN18
Recommendations	No further *investigationan

This findspot is on the south shore of the north fork of the reservoir. Since no other materials were collected, no further investigations are recommended.

FINDSPOTS WITH FROM 2 TO 10 ARTIFACTS

Nearly one-half of the findspots recorded during the shoreline survey of Rathbun reservoir in 1979 consisted of from two to 10 artifacts; many of these were flake scatters unaccompanied by other categories of artifacts. Those findspots where from two to 10 items were collected represent the most numerous category encountered along the shorelines of the reservoir. Forty - eight of the 104 findspots recorded in the reservoir comprise this category. Only 16% of the findspots in this category produced projectile points, 8% produced ceramics, and 16% produced lithic tools. Slightly more than 60% of the 48 findspots consisted entirely of flakes without associated artifacts. Findspots in this category were encountered in every part of the reservoir extending from the tributary valleys of the main body of the lake to the north and south forks.

Due to the limited quantities of materials recovered from the findspots in this category and the fact that materials were often thinly scattered without concentration, it is recommended that no further investigations be conducted at any of the 48 locations. Since materials were in limited quantities from these findspots, none were registered as sites with the Historic Preservation Officer for the state of Iowa.

USD1

Map Reference	USGS HIATTSVILLE 1:62500 1932
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay beach
Original Topography	Edge of Buck Branch tributary valley
Estimated Size	12 m x 6 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	2 flakes, 1 projectile point
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located immediately north of the damsite on the east side of Buck Creek cove approximately 20 m south of an old east-west trending road. Materials recovered from this findspot were too few and scattered to warrant a recommendation of additional investigation

ARTIFACT

Projectile Point:

A single corner notched point of gray chert was collected from this findspot (Figure 30a). The specimen has alternately beveled lateral margins and a ground concavity at the base. The point measures 35.8 mm in length, 20.2 mm in width, and 5.7 mm in thickness.

USD3

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay beach
Original Topography	Edge of Chariton tributary valley
Estimated Size	30 m x 8 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	6 flakes
Sites or Findspots within 400 m	13AN25, 13AN26
Recommendations	No further investigations

Findspot USD3 is located near the end of a small cove on the western shore of Buck Creek Park about 200 m below the location reported for 13AN26. No evidence is presently available to support the conclusion that this findspot is a part of the latter site or that the findspot may represent a secondary deposit of material derived from 13AN26. However, when 13AN26 was extensively tested and no subsurface materials were found it was assumed that the site had been destroyed by erosion. Since materials eroded from the site would be redeposited downslope. Circumstantial evidence suggests that USD3 may consist of materials redeposited from 13AN26. Due to the limited number of artifacts recovered from this findspot and the suggestion that it may represent a secondary deposit, no further investigations are recommended.

USD4

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay beach
Original Topography	Edge of the Chariton valley
Estimated Size	20 m x 6 m
Surface Visibility	Excellent, no cover
Findspot Condition	Eroding when water is high
Cultural Affiliation	Unknown
Investigations	Survey
Materials Collected	4 flakes
Sites or Findspots within 400 m	13AN202
Recommendations	No further investigations

This findspot is situated downslope from 13AN202 on a small point of land. Materials recovered from this findspot were too limited to justify further investigations.

USD7

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay beach
Original Topography	Edge of Buck Creek valley
Estimated Size	10 m x 10 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	10 flakes
Sites or Findspots within 400 m	USD6, USD8, 13AN25, 13AN26
Recommendations	No further investigations

This findspot is on the north side of a small cove on the west shore of Buck Creek cove. The limited number of artifacts recovered from this findspot do not support a recommendation for additional investigations.

USD10

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay beach
Original Topography	Edge of Honey Creek valley
Estimated Size	40 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Woodland?
Investigations	Survey
Materials Collected	1 retouched flake, 2 sherds
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located on an east-facing slope along the center of the western side of a small cove in Honey Creek State Park. It is possible that the material from this site represents slopewash from upslope sites, but none were found closer than 13AN1 during the survey of the park. On the basis of the limited numbers of artifacts recovered from this findspot, no further investigations are recommended.

ARTIFACTS

Retouched Flake:

A single retouched flake of light gray chert was found at this findspot. The specimen has a notch formed by steep retouch on one margin. The notch is 17 mm wide and 5 mm deep. The specimen is 43.2 mm in length, 29.3 mm in width, and 7.5 mm in thickness.

Ceramics:

Two body sherds with cord-roughening over their surfaces were recovered from this findspot. These vessels were apparently formed with the paddle and anvil technique using a cord-wrapped

peddle with cords set approximately 4.3 mm apart. Each cord was a single strand with a "Z" twist and very tight twist with the angle of the twist more than 90 degrees, making a very loosely twisted strand; 2.5 twists per centimeter were present. One sherd is 10.2 mm thick and the other is 9.2 mm thick. Both are grit-tempered with very large particles of grit, up to 4.5 mm thick. These two sherds appear to be from the same vessel, although no fit could be made. They are quite weathered, but in general, seem to be much harder than other sherds found during this survey. They also appear to have a greater density and are a dark brown/red color.

USD14

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Isolated find
Present Topography	Clay beach
Original Topography	Edge of valley joining Chariton valley
Estimated Size	Both objects were within .5 meters
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake, 1 hematite celt
Sites or Findspots within 400 m	USD13, 13AN208, 13AN207
Recommendations	No further investigations

This findspot is located on the east side of a small cove on the south shoreline of Honey Creek State Park. Both items were found within 50 cm of each other approximately 2 m from the shoreline. Although visibility was excellent in the area of the find, no other materials were found nearby. It is possible that this findspot represents the downslope movement of materials from a site upslope. However, a reconnaissance of the ground surface and erosional features on the slopes above the findspot failed to confirm the existence of a site in that location. Due to the limited quantity of materials from this findspot, no further investigations are recommended.

ARTIFACT

Celt:

The complete hematite celt from the findspot is ground over most of the surface with evidence of some pitting. The bit end is well ground and is convex. The specimen is 46 mm in length, 43.5 mm in width, and 14 mm in thickness.

USD16

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Uplands at the Chariton Valley edge
Estimated Size	6 m along beach
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	6 flakes
Sites or Findspots within 400 m	USD17
Recommendations	No further investigations

This findspot is on the west side of a small cove where it joins the main reservoir body. Due to the limited number of flakes from the site, further investigations are not recommended.

USD17

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	912
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Uplands at the edge of an intermittent Chariton tributary
Estimated Size	5 m x 6 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	8 flakes
Sites or Findspots within 400 m	USD16
Recommendations	No further investigations

Flakes were found on the east side of a small cove where it joins the main body of the reservoir. Since only 8 flakes were recovered from this findspot, no further investigations are warranted.

USD1a

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	912
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Uplands at the edge of the Chariton valley
Estimated Size	5 m x 5 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	10 flakes
Sites or Findspots within 400 m	13AN24
Recommendations	No further investigations

Flakes were found along the beach on a point of land which projects northward between two coves on the north shoreline of Island View Area. Materials at this findspot did not occur in sufficient quantities to warrant additional investigations.

USD20

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	912
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of a Chariton River tributary valley.
Estimated Size	6 m x 3 m
Surface Visibility	Excellent, Eroded Surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	3 flakes
Sites or Findspots within 400 m	USD19
Recommendations	No further investigations

This findspot is on the east side of a small cove on the south shoreline of the reservoir in Island View Area. Materials collected from this findspot were not in sufficient quantities to warrant additional investigations.

USD22

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of the valley of the north fork of the Chariton River
Estimated Size	9 m x 5 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	9 flakes
Sites or Findspots within 400 m	USD23
Recommendations	No further investigations

This findspot is located on the south shore of Bridgeview Public Use Area on the west side of a small cove where that cove joins the north fork of the reservoir. Materials were not collected from the surface of this findspot in quantities which would warrant additional investigations.

USD24

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of the Chariton Valley
Estimated Size	20 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	4 flakes, 1 biface
Sites or Findspots within 400 m	None
Recommendations	No further investigations

Flakes were found at the end of a small point of land on the south shore of Bridgeview area. Due to the small number of artifacts from this findspot, no further investigations are recommended.

ARTIFACT

Biface:

A single biface from this findspot (Figure 30b) has a rounded base and is made of white chert. The specimen measures 41.1 mm in length, 16.3 mm in width, and 8.5 mm in thickness.

USD25

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Thin lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of a tributary valley where it joins that of the north fork of the Chariton River
Estimated Size	24 m x 5 m
Surface Viability	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown
Investigations	Survey, testing
Materials Collected	3 flakes
Sites or Findspots within 400 m	USD44, 13AN16
Recommendations	No further investigations

Since the location of this findspot makes it the closest one to inundated 13AN16, shovel testing was conducted along the shoreline. Ten shovel tests were spaced at 10 m intervals along the beach. Each test was excavated to a depth of 35 cm. Fill was screened. No subsurface materials were recovered from any of the tests. Due to the limited quantity of artifacts recovered from this findspot, no further investigations are recommended.

USD29

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	End of a point of land between two tributary valleys along main Chariton River valley
Estimated Size	10 m x 4 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	8 flakes
Sites or Findspots within 400 m	USD27, USD28, 13AN37
Recommendations	No further investigations

This findspot is located on the eastern side of the cove which divides Rolling Cove Area into two halves. Materials recovered from this findspot were too limited in number to warrant a recommendation of additional investigations.

USD34

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Thin lithic scatter
Present Topography	Clay Beach
Original Topography	Near the narrowest segment of the north fork valley near the confluence of the two forks of the Chariton River
Estimated Size	20 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	6 flakes
Sites or Findspots within 400 m	USD33, USD35
Recommendations	No further investigations

This findspot is located along open shoreline on the south side of the north fork of the reservoir. The small number of flakes recovered precludes a recommendation for further testing.

USD37

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of a Chariton river tributary valley
Estimated Size	20 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown
Investigations	Survey
Materials Collected	10 flakes
Sites or Findspots within 400 m	USD35, 13AN73
Recommendations	No further investigations

This findspot is located on the west side of a cove. The location was formerly a valley of a tributary of the Chariton River. The surface collections from this findspot were too thinly scattered to warrant additional investigations.

USD41

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Chariton valley edge
Estimated Size	20 m x 4 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	2 flakes, 1 biface
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is on the north shore of the main body of the reservoir on the east side of a small cove. No additional investigations are recommended due to the small return from this findspot.

ARTIFACT**Biface:**

A single fragment of an ovate biface (Figure 30c) was collected from this findspot. The raw material is pink banded chert. Specimen measurements are 34.7 mm in length, 24.4 mm in width, and 6.4 mm in thickness.

USD43

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Chariton valley edge
Estimated Size	10 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	9 flakes
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located on open shoreline on the south shore of the reservoir. The materials from this findspot do not warrant a recommendation for further investigations there.

USD44

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of a Chariton tributary valley
Estimated Size	10 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	3 flakes, 1 projectile point
Sites or Findspots within 400 m	USD25
Recommendations	No further investigations

Artifacts were found on the east side of the mouth of a small cove west of Bridgeview Area. No further investigations are recommended due to the limited number of artifacts collected from this findspot.

ARTIFACT**Projectile Point:**

A single tip of a white chert projectile point measuring 30.5 mm in length, 17.5 mm in width, and 7.9 mm in thickness was found at this findspot (Figure 30d).

USD45

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of a Chariton tributary valley
Estimated Size	10 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	3 flakes, 1 projectile point
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located across the cove from USD44. The materials collected from this findspot are too few to warrant additional investigations.

ARTIFACT**Projectile Point:**

A broken specimen (Figure 30e) measuring 35.7 mm in length, 20.1 mm in width, and 7 mm in thickness was collected from this findspot. Raw material is gray chert with white streaks. Most of the base is missing, but enough exists to suggest that the specimen was corner notched.

USD48

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of the north fork valley
Estimated Size	20 m x 4 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	5 flakes
Sites or Findspots within 400 m	13AN21
Recommendations	No further investigations

Flakes were found on the west side of a point of land on the north shore of the north fork of the reservoir. Materials were too few to recommend further investigation.

USD56

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Two artifacts 4 m apart
Present Topography	Clay Beach
Original Topography	At the edge of a tributary valley near the juncture of the north and south forks of the Chariton River
Estimated Size	10 m along beach
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake, 1 projectile point
Sites or Findspots within 400 m	13AN17, 13AN205
Recommendations	No further investigations

This findspot is on the east side of a cove on the north shore of the north fork of the reservoir. Materials recovered from this findspot are too few in number to warrant a recommendation supporting additional recommendations.

ARTIFACT**Projectile Point:**

A corner notched single specimen with the tip end missing (Figure 30f) was found at this findspot. It is white chert with heavy brown flecks. The specimen measures 35.2 mm in length, 21.5 mm in width, and 7.6 mm in thickness.

USD59

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Honey Creek valley edge
Estimated Size	10 m x 3 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	3 flakes
Sites or Findspots within 400 m	USD60
Recommendations	No further investigations

The flakes from this findspot were found at the end of Honey Creek cove on the northern shoreline. Due to the limited numbers of artifacts recovered, no further investigations are recommended.

USD60

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Honey Creek valley edge
Estimated Size	15 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	6 flakes, 1 projectile point fragment
Sites or Findspots within 400 m	USD59
Recommendations	No further investigations

Flakes were found along the north shoreline of Honey Creek cove. Materials recovered were too few to warrant additional investigations.

ARTIFACT

Projectile Point:

A medial fragment of a large point (Figure 30g) was recovered from the surface of this findspot. It is of white chert and measures 22.1 mm in length, 24.8 mm in width, and 5.9 mm in thickness.

USD61

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the end of a valley which joins the Ham Branch near its juncture with Honey creek
Estimated Size	25 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	4 flakes, 1 biface
Sites or Findspots within 400 m	13AN203
Recommendations	No further investigations

This findspot is at the origin of a small cove on the north shore of Honey Creek cove where that cove joins the main body of the reservoir. Materials from this findspot were too few to support a recommendation of additional investigations.

ARTIFACT**Biface:**

The basal end of a small biface was collected from this findspot. The specimen has a square base with rounded corners and measures 42.5 mm in length, 23.5 mm in width, and 8.3 mm in thickness.

USD62

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the mouth of a tributary valley where it joins the Chariton River valley
Estimated Size	25 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	6 flakes
Sites or Findspots within 400 m	None
Recommendations	No further investigations

Six flakes were found on the east side of a large cove on the south shore of the main body of the reservoir. Materials recovered from this findspot were too few to warrant additional investigations there.

USD67

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of a small tributary valley which joins the south fork of the Chariton River
Estimated Size	10 m along beach
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown
Investigations	Survey
Materials Collected	2 flakes
Sites or Findspots within 400 m	USD66, USD68, USD69
Recommendations	No further investigations

This findspot is upstream from the juncture of the north and south forks of the reservoir and is on the north shore of the south fork. There are too few artifacts from this findspot to warrant further investigations.

USD69

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of the valley of the south fork of the Chariton River
Estimated Size	40 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	6 flakes
Sites or Findspots within 400 m	USD67, USD68, USD70, USD72
Recommendations	No further investigations

This findspot is upstream from the former confluence of the forks of the Chariton River and is on the north shore of the south fork. Based on the limited return from the findspot, no further investigations are recommended.

USD72

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land on the edge of the valley of the south fork of the Chariton River
Estimated Size	25 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Woodland
Investigations	Survey
Materials Collected	3 flakes, 2 sherds
Sites or Findspots within 400 m	USD69, USD70, 13AN77, 13AN78
Recommendations	No further recommendations

This findspot is upstream from the former confluence of the forks of the Chariton River and is on the north shore of the south fork across from the mouth of Jackson Branch. Based on the limited return from this findspot, no further investigations are warranted.

ARTIFACTS

Ceramics:

Two grit-tempered sherds, both too weathered to measure thickness were found at this location. 3.7 mm particle size seems to be the largest present in the paste.

USD73

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of the valley of the South Fork of the Chariton River
Estimated Size	30 m x 4 m
Surface Viability	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	6 flakes
Sites or Findspots within 400 m	USD74
Recommendations	No further investigations

This findspot is upstream from the former confluence of the forks of the Chariton River and is on the north shore of the south fork across from the mouth of the Jackson Branch. Since only 6 flakes were collected, no further investigations are warranted.

USD74

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of the valley of the South Fork of the Chariton River
Estimated Size	20 m x 4 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	5 flakes
Sites or Findspots within 400 m	USD73, USD75
Recommendations	No further investigations

This findspot is upstream from the former confluence of the forks of the Chariton River and is on the north shore of the south fork. The findspot is on the outer bend of a large meander of the former channel of the Chariton River near where a small tributary stream entered that body of water.

USD76

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Isolated findspot
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the south fork of the Chariton River
Estimated Size	Isolated findspot (2 m wide)
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	2 flakes
Sites or Findspots within 400 m	USD80
Recommendations	No further investigations

This findspot is located on the north shore of of a small cove on the south fork of the reservoir. Both of the flakes collected from the findspot were located 2 m from the shoreline, and 2 m apart.

USD77

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the south fork of the Chariton River
Estimated Size	10 m x 4 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	4 flakes
Sites or Findspots within 400 m	USD78
Recommendations	No further investigations

This findspot is situated on the north shore of the south fork of the reservoir, approximately 200 m west of a former bend in the Chariton River. Due to the limited surface sample recovered from this findspot, no further investigations are recommended.

USD80

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Base of a slope on the south shore of the valley of the south fork of the Cheriton River
Estimated Size	20 m x 4 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	4 flakes
Sites or Findspots within 400 m	USD76, USD83
Recommendations	No further investigations

This findspot is located on the eastern side of a small point of land near where the valley of the south fork of the reservoir narrows. Due to the limited amount of material collected, no further investigations are warranted.

USD81

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Thin lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the south fork of the Chariton River
Estimated Size	30 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	8 flakes
Sites or Findspots within 400 m	USD79
Recommendations	No further investigations

This findspot is located adjacent to, and on the north side of, an old meander of the Chariton River 300 m upstream from USD79. Materials from the findspot are too few to warrant additional investigations.

USD83

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Floodplain of the south fork of the Chariton River
Estimated Size	25 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	3 flakes
Sites or Findspots within 400 m	USD80
Recommendations	No further investigations

This findspot is located on the west side of a small cove on the south shoreline of the south fork of the reservoir. Materials are too few to warrant additional investigations.

USD84

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Buck Creek valley edge at a point where a tributary stream joins that valley
Estimated Size	In strand line 30 m along beach
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	4 flakes
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is situated on the side of a cove dividing Buck Creek Area into east and west halves. The location is adjacent to the former confluence of Buck Creek and an unnamed tributary of that stream. Materials appear to be a secondary deposit and were mixed with modern debris on the beach. As a consequence, no further investigations are recommended.

USD87

Map Reference	USGS RUSSELL 1:62500
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of the valley of the North Fork of the Chariton River near the mouth of a small tributary valley
Estimated Size	20 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Woodland
Investigations	Survey
Materials Collected	1 flake, 2 small sherds
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is situated on the south shore of the north fork of the reservoir on the west side of a cove. Due to the limited amount of material in the surface collection from this findspot, no further investigations are recommended.

ARTIFACTS

Ceramics:

USD87 artifacts include one grit-tempered sherd, 4.8 mm thick with smoothed over cord marks. A second sherd from this findspot is cord-roughened with the cord very indistinct because of weathering. This sherd is 10.7 mm thick with particle size up to 5 mm.

USD88

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Terrace
Original Topography	Terrace in the floodplain of the North Fork of the Chariton River
Estimated Size	30 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Woodland?
Investigations	Survey
Materials Collected	3 flakes, 3 sherds
Sites or Findspots within 400 m	USD104
Recommendations	No further investigations

This findspot is located on the end of a point of land on the north side of the north fork of the reservoir. The surface collection from this findspot was too small to warrant a recommendation for additional investigations.

ARTIFACTS

Ceramics:

Ceramics from USD88 include three grit-tempered sherds. All of the specimens are 8.8 mm thick with grit size up to 3.4 mm. One sherd is very crumbly and is extremely difficult to measure.

USD93

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Mouth of a small tributary valley which joins that of the north fork of the Chariton River
Estimated Size	10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake, 1 preform
Sites or Findspots within 400 m	USD52, USD94, USD95
Recommendations	No further investigations

This findspot is located on the south shore of the north fork of the reservoir. The location is at the eastern edge of a small cove which was formerly a tributary valley joining that of the Chariton River. The size of the surface collection from this findspot precludes additional investigations.

ARTIFACTS

Preform:

A large pink and red chert preform tip was found at this location. The specimen measures 47.2 mm in length, 38.8 mm in width, and 14 mm in thickness.

USD95

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Mouth of a tributary valley which joins that of the north fork of the Chariton River
Estimated Size	40 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	7 flakes, 1 projectile point
Sites or Findspots within 400 m	USD93, USD94
Recommendations	No further investigations

This findspot is located on the east side of a small cove on the south shore of the north fork of the reservoir. Materials collected were too few to warrant further investigations.

ARTIFACT**Projectile Point:**

A single projectile point tip was recovered from this findspot. It is pink and white chert and measures 24.2 mm in length, 20.9 mm in width, and 6.9 mm in thickness.

USD96

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of a small tributary valley which joins that of the Chariton River
Estimated Size	60 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	5 flakes, 1 projectile point
Sites or Findspots within 400 m	USD97, 13AN9, 13AN204
Recommendations	No further investigations

This findspot is located along the shoreline at the head of a small cove. Materials were too thinly scattered to warrant additional investigations.

ARTIFACT**Projectile Point:**

A single projectile point base was recovered from this findspot. The specimen is dark red grainy chert and is notched at one corner of the base. Secondary retouch is generally lacking on this specimen, so it is possible that it was broken during the early stages of the manufacturing process. The specimen is 28 mm in length, 28 mm in width, and 7 mm in thickness.

USD98

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of a tributary valley which joins that of the south fork of the Chariton River
Estimated Size	20 m x 5 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	4 flakes
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located at the east side of a small cove on the south shoreline of the south fork of the reservoir. The cove is the valley of what was the Sandy Branch of the south fork of the Chariton River. Materials were too thinly scattered to warrant further investigations.

USD99

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the base of a point of land which extends into the floodplain of the south fork of the Chariton River
Estimated Size	20 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	2 flakes, 1 preform
Sites or Findspots within 400 m	US100
Recommendations	No further investigations

This findspot is located on the south shore of the south fork of the reservoir at the mouth of Sandy Branch cove. Materials collected from this findspot were too few to warrant additional investigations.

ARTIFACT

Projectile Point:

A complete preform (Figure 30h) from this findspot has a tapered base and a slight constriction in the medial parts of the lateral margins. The specimen is gray with yellow bands and it is nearly half as wide as it is thick. The specimen measures 60.9 mm in length, 22 mm in width, and 9.9 mm in thickness.



a
USD1



b
USD24



c
USD41



d
USD44



e
USD45



f
USD56



g
USD60



h
USD99

actual size

FIGURE 30. Artifacts Recovered from Rathbun Shoreline Findspots

USD100

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of the valley of the south fork
Estimated Size	15 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	9 flakes
Sites or Findspots within 400 m	USD99
Recommendations	No further investigations

This findspot is located along the open shoreline on the north shore of the south fork of the reservoir across from the mouth of the Sandy Branch. Collections from this findspot were too few to warrant additional investigations.

USD101

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the south fork of the Chariton River
Estimated Size	30 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	5 flakes
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located on the north shore of the south fork of the reservoir on the outer edge of a bend. Materials collected from this site are too few to warrant a recommendation for further investigations.

USD102

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of the Chariton River valley
Estimated Size	10 m along shoreline
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	1 flake, 1 scraper
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located on open shoreline to the west of Honey Creek State Park.

ARTIFACT

End Scraper:

An end scraper with a converging base was found at this findspot. The specimen is 24.5 mm in length, 17.3 mm in width, and 8.9 mm in thickness. The specimen is made of white and gray chert.

USD104

Map Reference	USGS RUSSELL 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Mouth of small tributary valley which joins the valley of the north fork of the Chariton River
Estimated Size	30 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	4 flakes
Sites or Findspots within 400 m	USD88
Recommendations	No further investigations

This findspot is on the south shoreline of the north fork of the reservoir. Surface materials from this findspot were too few and thinly scattered to warrant additional investigations.

FINDSPOTS WITH FROM 11 TO 25 ARTIFACTS

Nineteen findspots were assigned to this category. In general, findspots with from 11 to 25 items of material culture consist of both flakes and other artifacts. Slightly more than one-third of these findspots were flake scatters with no accompanying artifacts. Thirty-five percent of the findspot assemblages contain either projectile points or other lithic tools which are often accompanied by other artifacts. Ceramics were encountered at only 2 findspots in this category.

Findspots in this category were found primarily along the north and south forks of the reservoir; seven findspots were recorded along the shoreline of the north fork and eight were recorded on the shores of the south fork. Only five findspots of this category were found on the shoreline of the main reservoir body or its tributaries.

Recommendations for findspots in this category are similar to those made for categories with fewer artifacts; due to the limited numbers of artifacts and to the fact that most deposits were scattered over the beach, no further investigations are warranted.

USD5

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay beach
Original Topography	Edge of the Chariton valley
Estimated Size	50 m x 10 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	12 flakes, 1 polyhedral core
Sites or Findspots within 400 m	13AN27
Recommendations	No further investigations

This findspot is located on the west shoreline of Buck Creek Park on the north side of the causeway which provides access to the cove. The limited number of artifacts from this findspot precludes a recommendation of additional investigations.

USD9

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Sand beach
Original Topography	Juncture of Buck Branch and tributary
Estimated Size	150 m x 10 m
Surface Visibility	Excellent, in sand
Findspot Condition	Eroding when water is high
Cultural Affiliation	Unknown
Investigations	Survey, testing
Materials Collected	25 flakes
Sites or Findspots within 400 m	USD2
Recommendations	No further investigations

This findspot is on the east bank of Buck Creek cove. Three shovel tests within the scatter of artifacts at this findspot did not reveal evidence of buried deposits containing cultural materials. Due to the scattered nature of the surface finds additional investigations are not warranted.

USD12

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay beach
Original Topography	Edge of the Chariton valley
Estimated Size	40 m x 8 m
Surface Visibility	Excellent, eroded surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	11 flakes
Sites or Findspots within 400 m	USD11, 13AN206
Recommendations:	No further investigations

The flakes were recovered from the east side of a small cove on the south side of Honey Creek State Park. Since only 11 flakes were recovered from this findspot, no further investigations are recommended.

USD35

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Near the narrowest segment of the north fork valley near the confluence of the two forks of the Chariton River
Estimated Size	50 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Woodland
Investigations	Survey
Materials Collected	20 flakes, 2 sherds, 1 projectile point
Sites or Findspots within 400 m	USD33, USD34, 13AN73, USD37
Recommendations	No further investigations

This findspot is located on the south shore of the north fork of the reservoir. The small surface collection from the site precludes a recommendation of additional investigations.

ARTIFACTS

Projectile Point:

A single midsection of a projectile point (Figure 31a) from this site measures 24 mm in length (incomplete), 36.6 mm in width, and 10.4 mm in thickness. The basal end of this specimen is missing, but a remnant of a corner notch remains to indicate the technique of hafting. The raw material is pink-veined chert which is quite grainy in texture.

Ceramics:

USD35 collections included two grit-tempered, very weathered sherds. Both have characteristic orange paste; each was too exfoliated to allow measurement of thickness.

USD38

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of a north fork tributary valley
Estimated Size	60 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	21 flakes, 1 projectile point fragment
Sites or Findspots within 400 m	13AN73
Recommendations	No further investigations

This findspot is located at the southwestern edge of a cove on the north fork of the reservoir.

ARTIFACT**Projectile Point:**

One broken projectile point was found at this findspot (Figure 31b). It is side notched with part of the base and the tip missing. The point is made of waxy gray chert and measures 28.7 mm in length, 22 mm in width, and 6.9 mm in thickness.

USD39

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Edge of north fork valley
Estimated Size	100 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	20 flakes and 1 sidescraper
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is on open shoreline on the southern shore of the north fork of the reservoir. The small collection from the findspot precludes a recommendation of further investigations.

ARTIFACT

Sidescraper:

A sidescraper of tan chert was collected from the findspot. The specimen has a single line of convex retouch along 30 mm of one lateral margin. The specimen measures 47 mm in length, 42 mm in width, and 12.5 mm in thickness.

USD46

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of a north fork tributary valley
Estimated Size	30 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	22 flakes, 1 projectile point
Sites or Findspots within 400 m	None
Recommendations	No further investigations

Cultural remains were found on the west side of a cove on the north shore of the north fork of the reservoir. Further investigations at the findspot are not warranted due to the limited number of artifacts recovered.

ARTIFACT**Projectile Point:**

One broken specimen (Figure 31c) was found at this findspot. The raw material is orange gray chert. Since the base is missing, it is difficult to determine if the point was stemmed or corner notched. The specimen is 21.7 mm in length, 22.9 mm in width, and 5.5 mm in thickness.

USD57

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of the Chariton River valley near the juncture of its two forks
Estimated Size	50 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	23 flakes, 1 projectile point
Sites or Findspots within 400 m	13AN205
Recommendations	No further investigations

This findspot is located midway between two coves on the north shore approximately 1 mile east of the confluence of the north and south forks of the reservoir. Materials from the surface of this findspot were too few to warrant additional investigations.

ARTIFACT

Projectile Point:

A single specimen with the base missing below the notches (Figure 31d) was recovered from this findspot. The raw material is gray chert with white and brown inclusions. The specimen measures 32.2 mm in length, 20.3 mm in width, and 6 mm in thickness.

Map Reference	USD63 USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the south fork of the Chariton River upstream from the confluence of the two forks
Estimated Size	150 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Archaic
Investigations	Survey
Materials Collected	21 flakes, 2 projectile points 1 retouched flake
Sites or Findspots within 400 m	13AN74
Recommendations	No further investigations

This findspot is on the north shore of the south fork of the reservoir approximately 1 mile from the juncture of the two forks. Materials recovered from the surface of this findspot were too scattered to warrant additional investigations.

ARTIFACTS

Projectile Points:

Two side notched projectile points were recovered from this findspot. The first point (Figure 31e) is of gray and pink chert and has the tip missing and has basal grinding. The specimen measures 31.9 mm in length, 23.5 mm in width, and 7 mm in thickness. The point is similar to specimens found in an Archaic context at Cannon Reservoir in northeastern Missouri (O'Brien and Warren 1982:108). The other specimen (Figure 31f) is a large side notched projectile point of speckled gray chert which measures 49.8 mm in length, 34.7 mm in width, and 9.5 mm in thickness.

Retouched Flake:

A flake with retouch extending 14 mm along one margin was found at this findspot. The specimen is 32 mm in length, 50.1 mm in width, and 9 mm in thickness.

USD66

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the south fork of the Chariton River
Estimated Size	30 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	10 flakes, 1 biface
Sites or Findspots within 400 m	USD65, USD67, USD68
Recommendations	No further investigations

This findspot is located near the juncture of the north and south forks of the reservoir on the northern shore of the south fork. Materials recovered from this findspot were too few in number to warrant additional investigations there.

ARTIFACT

Biface:

A single quartzite biface was recovered from the surface of this findspot. The lateral margins of this specimen are constricted. The specimen is white quartzite and measures 74 mm in length, 44 mm in width, and 23 mm in thickness.

USD68

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of a small tributary valley which adjoins the South Fork of the Chariton River
Estimated Size	40 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Woodland
Investigations	Survey
Materials Collected	21 flakes, 1 sherd
Sites or Findspots within 400 m	USD66, USD67, USD69
Recommendations	No further investigations

This findspot is upstream from the former confluence of the forks of the Chariton River and is on the north shore of the south fork. Materials from this findspot were too scattered and few to warrant further investigations.

ARTIFACT**Ceramics:**

One grit-tempered, weathered sherd was recovered. No thickness could be ascertained.

USD70

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of a point of land above the floodplain of the north fork of the Chariton river
Estimated Size	24 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	13 flakes
Sites or Findspots within 400 m	USD69, USD72, 13AN77
Recommendations	No further investigation

This findspot is upstream from the former confluence of the forks of the Chariton River and is on the north shore of the south fork. Quantities of materials recovered from the surface of this findspot are not sufficient to recommend further investigations.

USD78

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	904
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the south fork of the Chariton River
Estimated Size	30 m x 9 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	21 flakes
Sites or Findspots within 400 m	USD77
Recommendations	No further investigations

This findspot is along the northern shore of the south fork of the reservoir where the lake width and the valley narrows. The location is inundated or isolated from the shoreline by water when the reservoir rises above approximately 904 feet. Additional investigations are not recommended due to the limited quantities of materials recovered from this findspot.

USD79

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Terrace on the north side of the south fork of the Chariton River
Estimated Size	25 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	22 flakes, 1 projectile point, 1 scraper, 1 retouched flake
Sites or Findspots within 400 m	USD61

Recommendations No further investigations
This findspot is situated along the north side of the former Chariton River channel (south fork). Collections from the findspot are too limited in quantity to warrant additional investigations there.

ARTIFACTS

Projectile Point:

A single basal fragment of a side notched projectile point was found on the surface of the findspot. The raw material is gray and pink chert. The length of the incomplete specimen measures 19.7 mm in length, 21.8 mm in width and 8.6 mm in thickness.

Scraper:

A thumbnail scraper with a converging base was found at this findspot. The specimen is pink chert and measures 25.5 mm in length, 25.9 mm in width, and is 12 mm in thickness.

Retouched Flakes:

A flake with a line of retouch 22 mm along both sides of one margin was found at this findspot. The specimen is of gray chert and is 39 mm in length, 37.6 mm in width, and is 10.8 mm in thickness.

USD62

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Edge of a tributary valley which joins that of the south fork of the Chariton River
Estimated Size	80 m x 8.5 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	15 flakes
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This site is located on the west side of a small cove on the south fork of the reservoir. The cove was formerly an east-west trending valley formed by a tributary of the Chariton River. Based on the limited surface collection from this findspot, no further investigations there are recommended.

USD45

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of the valley of the north fork of the Chariton River
Estimated Size	20 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Late Woodland
Investigations	Survey
Materials Collected	11 flakes, 1 projectile point, 1 scraper and 1 preform
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located on the west side of a cove on the north shore of the north fork of the reservoir. The limited amount of material collected from the findspot precludes a recommendation of additional investigations there.

ARTIFACTS

Projectile Point:

One specimen with a broken tip and base (Figure 31g) was found at this findspot. The point has a triangular blade and an expanding stem. The point is mottled gray chert with brown and pink inclusions and measures 32.5 mm in length, 16.5 mm in width, and 6 mm in thickness. The specimen is similar to ones with triangular blades and expanding stems from Cannon Reservoir in northeastern Missouri which are recovered from Late Woodland contexts (O'Brien and Warren 1982:127).

Scraper:

A single quartzite scraper was found at this location. The specimen has steep retouched margins, an ovate shape, and is

retouched along the entire perimeter. The end opposite the rounded scraping edge converges to a point. The specimen measures 57 mm in length, 32.1 mm in width, and 17 mm in thickness.

Preform:

A medial fragment of a large quartzite preform was found at this findspot. The specimen is dark red and measures 41.5 mm in length, 49.5 mm in width, and 12.2 mm. in thickness.

USD91

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Mouth of a tributary valley where it joins that of the south fork of the Chariton River
Estimated Size	35 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	13 flakes, 1 projectile point
Sites or Findspots within 400 m	13AN78
Recommendations	No further investigations

This findspot is located on the west side of a small cove which was a former tributary valley joining the south fork of the Chariton River. Materials collected from the surface of the findspot are too few to warrant a recommendation of additional investigations there.

ARTIFACT

Projectile Point:

A single projectile point fragment, broken at both ends (Figure 31h), was collected from the site. Although the hafting element has been mostly destroyed by breakage, enough remains to suggest that the point was corner notched. The specimen measures 29.9 mm in length, 31 mm in width, and 7.4 mm in thickness.



a
USD35



b
USD38



c
USD46



d
USD57



e
USD63



f
USD63



g
USD85



h
USD91

actual size

FIGURE 31. Artifacts from Rathbun Shoreline Findspot

USD94

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Mouth of a tributary valley which joins the north fork of the Chariton River valley
Estimated Size	15 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	20 flakes, 1 ground hematite fragment
Sites or Findspots within 400 m	USD52, USD93, USD95
Recommendations	No further investigations

This findspot is located on open shoreline on the south shore of the north fork of the reservoir. Surface collections from this findspot were too thinly scattered and few in number to warrant additional investigations there.

ARTIFACT**Ground Hematite:**

An irregularly shaped fragment of hematite with a single ground facet, bearing unidirectional striations, was found at this findspot. The specimen measures 31.8 mm in length, 28.7 mm in width, and 7.9 mm in thickness.

USD97

Map Reference	USGS MYSTIC 1:62500
Elevation	907
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	
Estimated Size	20 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	19 flakes
Sites or Findspots within 400 m	USD96, 13AN9, 13AN204
Recommendations	No further investigations

This findspot is located at the end of a small cove on the north shore of the reservoir. Materials were too thinly scattered to warrant a recommendation of additional investigations.

FINDSPOTS WITH FROM 26 TO 100 ARTIFACTS

The 13 findspots in this category all have produced from 25 to 90 artifacts, the majority of which are lithic flakes. As in the case of findspot categories where fewer artifacts were found, one - third of the findspots in this category were flake scatters lacking associated artifacts. Only three findspots produced projectile points and six produced other lithic tools. No ceramics were recovered from any findspot in this category. It is possible that findspots in this category represent either preceramic occupations or else temporally later specialized activity areas.

With the exception of USD15, findspots where from 26 to 100 artifacts were found are either on shorelines of one of the two forks of the reservoir. As will be shown with the next larger class of findspots which is composed of those with more than 100 artifacts, findspot assemblages sizes are larger for those locations either on one of the two forks of the reservoir or near their juncture with the main body of the lake.

Recommendations for findspots with from 26 to 100 items of material culture are based on the fact that the quantities of material recovered. Findspots where more than 50 items were recovered are recommended for monitoring. Recommendations for the 5 larger findspots in this category are that they do not warrant testing, but should warrant monitoring to determine the source of the materials and to see if additional materials are disclosed by erosion. Eight of the findspots do not warrant further investigations.

USD15

Map Reference	USGS MYSTIC 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Uplands at the Chariton Valley edge
Estimated Size	40 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	40 flakes
Sites or Findspots within 400 m	13AN201
Recommendations	No further investigations

This findspot is at the end of a point of land at the north side of a small cove near the east end of Island View Area. Due to the limited quantity of materials from this findspot no further investigations are recommended.

USD30

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	907
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Edge of small tributary valley which joins that of the south fork
Estimated Size	40 m x 9 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	25 flakes, 2 projectile points, 2 biface fragments
Sites or Findspots within 400 m	USD91, 13AN30, 13AN32

Recommendations No further investigations
The location of this findspot is one-third mile west of the former confluence of Jackson Branch and the south fork of the Chariton River. The location is presently at the mouth of a cove in the south shore of the south fork of the reservoir. Nearby 13AN31 was tested and found to contain no subsurface components. Due to the limited numbers of artifacts recovered from this findspot, no further investigations are recommended.

ARTIFACTS

Projectile Points:

Two broken projectile points were collected from this findspot. One specimen (Figure 32a) is stemmed and has a broken tip. An incomplete specimen (Figure 32b) is broken at both the base and the tip and measures 23.8 mm in length, 22.3 mm in width, and 5.4 mm in thickness.

Bifaces:

Two biface fragments were found at this findspot. One specimen is a rounded base of pink and gray banded chert which measures 37.8 mm, 32 mm, and 12.3 mm. The other specimen is also a rounded base with the tip missing. This specimen is made of red-brown chert. It measures 32.5 mm in length, 25.4 mm in width, and 8 mm in thickness.

USD32

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of the valley of the North Fork of the Chariton River
Estimated Size	40 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	38 flakes, 1 projectile point
Sites or Findspots within 400 m	USD33, USD55
Recommendations	No further investigations

This findspot is located on the east side of a small cove on the south shore of the north fork of the reservoir. Testing at the site with six 50 cm tests excavated to depths of up to 1 m failed to indicate evidence for material in subsurface context. On the basis of the results of testing, no further investigations are recommended at this findspot.

ARTIFACT

Projectile Point:

A single triangular projectile point was recovered from this findspot (Figure 32c). The specimen measures 18.1 mm in length, 11.7 mm in width, and 3.1 mm in thickness. Four side notches have been placed at the base. The raw material is white chert. The tip of a similar specimen was also found at this findspot (Figure 32d).

USD33

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Near the narrowest segment of the north fork valley near the confluence of the two forks of the Chariton River
Estimated Size	60 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	44 flakes, 2 biface fragments
Sites or Findspots within 400 m	USD32, USD34, USD35, USD55
Recommendations	No further investigations

This findspot is located on the south shore of the North Fork of the reservoir. The quantity of materials recovered do not warrant recommendations for further investigations.

ARTIFACTS

Bifaces:

Two basal biface fragments were recovered from this findspot. The larger of the two is red chert, the smaller is white and red. The two specimens measure 39 mm and 23.8 mm in length, 26.5 mm and 27 mm in width, and 8 mm and 6.3 mm in thickness.

USD42

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Edge of the Chariton valley near the juncture of the north and south forks
Estimated Size	100 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected Sites or Findspots	63 flakes
within 400 m	None
Recommendations	Source of materials should be defined

This findspot is located 1 mile south of the confluence of the north and south forks of the reservoir on the south shoreline. The quantity of flakes recovered and the density of the materials warrant monitoring to determine if subsurface materials might be exposed by erosion.

USD47

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	On a point of land at the valley edge of the south fork of the Chariton river
Estimated Size	100 m x 20 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	54 flakes, 1 projectile point
Sites or Findspots within 400 m	13AN21
Recommendations	No further investigations warranted

This findspot is located at the tip of a point of land on the north shore of the north fork of the reservoir. Results of 6 shovel tests spaced at 10 m intervals along the shoreline and within the flake scatter produced no evidence of subsurface materials.

ARTIFACT

Projectile point:

The point collected from this findspot is a nearly complete reworked specimen (Figure 32e) with a small part of one side of the base missing. Raw material is speckled pink chert. This specimen was probably modified for use as a hafted scraper. The specimen is 27.9 mm in length, 37.7 mm in width, and 8.3 mm in thickness.

USD50

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Sloping land on the Chariton valley edge
Estimated Size	90 m x 11 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	85 flakes, 1 retouched flake, 1 biface
Sites or Findspots within 400 m	None
Recommendations	Monitor to determine if additional materials appear

This findspot is on the east side and at the mouth of a small cove on the south shore of the north fork of the reservoir. Monitoring is recommended and is based on the quantities of materials recovered.

ARTIFACTS

Biface:

The rounded base of a biface was also collected at this findspot. The specimen is pink and gray banded chert and measures 20.7 mm in length, 28.8 mm in width and 5.8 mm in thickness.

Retouched Flake:

The one retouched flake from this location has lateral modification of the margin adjacent to the striking platform remnant. Retouch extends along the margin 17 mm, forming a convex working edge. The specimen measures 47.2 mm in length, 32 mm in width, and 10.5 mm in thickness.

USD51

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Edge of a tributary valley of the north fork of the Chariton River
Estimated Size	50 m x 6 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	32 flakes
Sites or Findspots within 400 m	None
Recommendations	No further investigations

This findspot is located along open shoreline between two coves on the south shore of the north fork of the reservoir. Materials were not recovered from this findspot in quantities large enough to warrant additional investigations.

USD52

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of the valley of the north fork of the Chariton river
Estimated Size	40 m x 8 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	56 flakes
Sites or Findspots within 400 m	USD93, USD94
Recommendations	Monitor to determine if materials are exposed by erosion

Located on open shoreline between two coves on the south shore of the north fork of the reservoir. Materials recovered are in a sufficient quantity and density to warrant additional investigations.

USD53

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of a tributary of the north fork of the Chariton River
Estimated Size	20 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	23 flakes, 2 bifaces, 1 projectile point
Sites or Findspots within 400 m	13AN75
Recommendations	No further investigations

This findspot is located on open shoreline between two coves on the south shore of the north fork of the reservoir. Materials from this findspot were too few to warrant a recommendation supporting additional investigations.

ARTIFACTS

Projectile Point:

A gray chert specimen (Figure 32f) from this findspot measures 24.5 mm in length, 24.4 in width, and 5.5 mm in thickness.

Bifaces:

A complete biface with one rounded and one pointed end was recovered from this findspot. The specimen is made of white and gray chert and is quite thick in cross section, making the lateral edge angles steep. The specimen measures 41 mm in length, 15.6 mm in width, and 8.5 mm in thickness. The point of another biface was also found at this findspot. The specimen is pointed and is made of pink chert. It measures 36 mm in length, 38.7 mm in width, and 10 mm in thickness.

USD55

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of a narrowing in the valley of the north fork
Estimated Size	20 m x 10 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	32 flakes
Sites or Findspots within 400 m	USD32, USD33
Recommendations	No further investigations

This findspot is on the east side of a small cove on the south shore of the north fork of the reservoir. Materials recovered from this findspot were too few and scattered to warrant additional investigations.

USD64

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the south fork of the Chariton River
Estimated Size	180 m x 12 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding by wave action
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	90 flakes, 1 scraper, 3 bifaces
Sites or Findspots within 400 m	USD65
Recommendations	Monitor to determine source of materials

This findspot is on the north shore of the south fork of the reservoir. Monitoring is recommended based on the quantity of materials recovered. The materials were too scattered to warrant testing of the area.

ARTIFACTS

Scraper:

A pink and red flake with a rounded scraping edge on one margin was found. The scraping edge extends 13.1 mm along the margin. The specimen is 31 mm in length, 22 mm in width, and 9.1 mm in thickness.

Bifaces:

Three broken bifaces were found. One specimen (Figure 32g) is made of gray and reddish chert and has one straight and one convex margin. It measures 27 mm in length, 23 mm in width, and 7.6 mm in thickness. A second specimen is gray chert and lacks the tip. Breakage of this specimen probably occurred during the

later stages of manufacturing when a large projection adjacent to the break could not be thinned. Steep step fractures surround the projection, indicating that attempts were made by the knapper to remove it. The specimen has a square base with rounded corners and measures 31.5 mm in length, 26 mm in width, and 9 mm in thickness. A third fragment is a pointed tip of white and gray chert which measures 24.5 mm in length, 17.3 mm in width, and 8.9 mm in thickness.



a

USD30



b

USD30



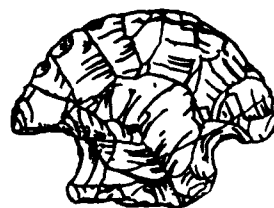
c

USD32



d

USD32



e

USD47



f

USD53



g

USD64

actual size

FIGURE 32. Artifacts from Rathbun Shoreline Findspots

USD89

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	End of a point of land extending into the floodplain of the North Fork of the Chariton River
Estimated Size	80 m x 9 m
Surface Visibility	Excellent, eroding surface
Findspot Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	56 flakes, 1 biface, 1 retouched flake
Sites or Findspots within 400 m	13AN78
Recommendations	Monitor to determine if additional materials are exposed by erosion

This findspot is located at the end of a point of land which extends into the northern shoreline of the north fork of the reservoir.

ARTIFACTS

Bifaces:

A biface with a rounded base and a pointed tip was recovered from this findspot. The specimen is made of pink and gray speckled chert and measures 37.5 mm in length, 28.7 mm in width, and 7.9 mm in thickness.

Retouched Flake:

A gray chert flake with one margin retouched over its entire length was collected from this findspot. The specimen measures 40.9 mm in length, 38.6 mm in width, and 14.8 mm in thickness.

SHORELINE SITES RECORDED DURING 1979

Eight of the 104 findspots recorded in 1979 have produced materials in quantities which are sufficient to warrant assigning site numbers to them. The eight sites were assigned designations 13AN71 through 13AN7 and were registered with the Iowa State Historic Preservation Office. Quantities of materials recovered from these eight sites range between 123 and 282 items including debitage. All but one of the sites has produced projectile points, the exception is a lithic scatter consisting of 149 flakes. Ceramics were recovered from only one-half of the sites in this category, while slightly more than half of the eight sites have produced lithic tools other than projectile points.

Locations of the sites in this category differ from those of other categories; each of the eight sites is located either on the shoreline of the north fork (4 sites), the south fork (3 sites) or near the juncture of the two forks (1 site). The sites recorded during the 1979 survey are generally isolated from other findspots by distances of up to one-quarter mile. Five of the sites have no evidence of other sites or findspots within 400 m (along shorelines) and none of the eight are nearer than 200 m to another site or findspot.

13AN71

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	905 - 910
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	At the edge of the valley of the North Fork of the Chariton River
Estimated Size	100 m x 100 m
Surface Visibility	Excellent, eroded surface
Site Condition	Eroding surface
Cultural Affiliation	Woodland or Archaic
Investigations	Survey, testing
Materials Collected	134 flakes, 2 endscrapers, 4 biface fragments, and 6 projectile points
Sites or Findspots within 400 m	None
Recommendations:	No further investigations

This site is located at the end of a prominent point of land which protrudes into the main channel of the reservoir. It is at the south of the south fork of the reservoir. Materials were encountered on the surface along the shoreline 200 m northward into a playground area. Since lithic debris was found at this site in larger quantities than at most other findspots in the reservoir area, it was decided to conduct subsurface testing to determine if portions of the deposit existed were present below the ground surface. No subsurface materials were recovered from this site, so no further investigations are recommended.

SITE TESTING

One 50 cm square test was excavated in the playground north of the shoreline in an area where flakes were noted on the surface. Another test measuring 50 cm x 1 m was excavated 10 m north of the shoreline. Although excavated to a depth of 70 cm, no materials were recovered from below the immediate surface.

13AN71 ARTIFACTS

Projectile Points:

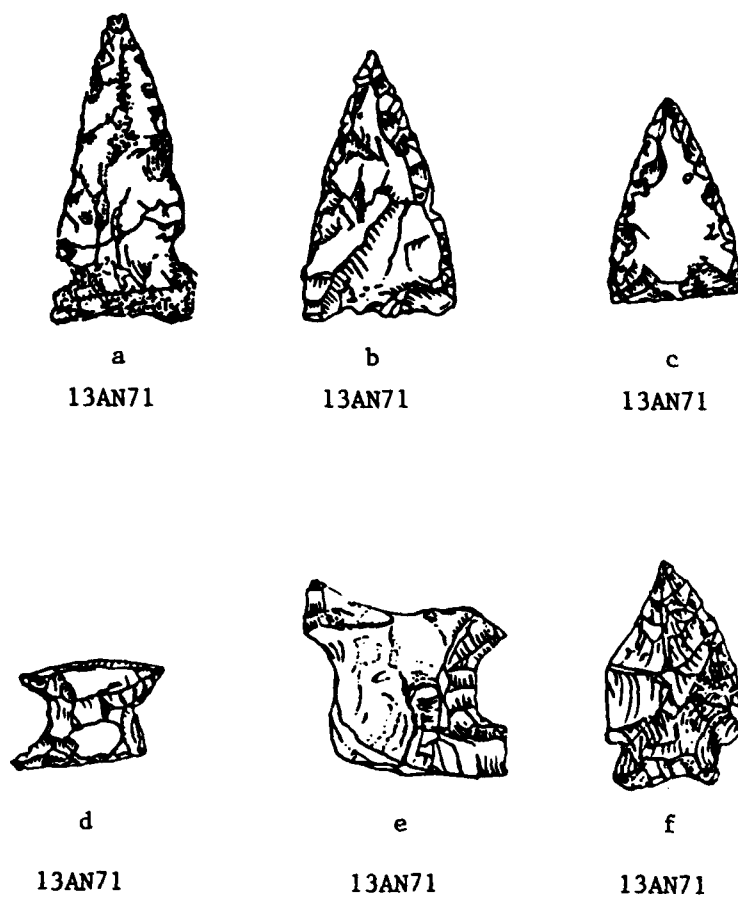
Six projectile points were recovered from the surface of this site and exhibit an extreme range of stylistic variation. The first specimen (Figure 33a) is side notched and is made of white and pink chert. This specimen measures 41.3 mm in length, 20.6 mm in width, and 7.4 mm in thickness. The second specimen is nearly complete, but lacks portions of the base (Figure 33b). This specimen was probably corner notched. It is made of white chert. The specimen measures 36.1 mm in length, 10.8 mm in width, and 4.4 mm in thickness. The third specimen is triangular in outline and was made from a flake of yellow brown and red speckled chert. This specimen (Figure 33c) measures 26.4 mm in length, 17.2 mm in width, and 3.6 mm in thickness. Specimen numbers 4 and 5 from this site (Figure 33d and 33e) are both basal fragments of side notched projectile points. The two specimens are 24 mm and 14 mm in length, 27.9 mm and 22.5 mm in width, and 9.3 mm and 5.9 mm in thickness. The sixth specimen is corner notched and lacks a part of one of the lateral margins near the tip (Figure 33f). This point is made of gray and white speckled chert and measures 31.4 mm in length, 19.1 mm in width, and 5.1 mm in thickness.

Endscrapers:

Two endscrapers were recovered from the surface of this site. Each of the specimens has a rounded, unifacial working edge on the end of the long axis. The larger specimen is a double-ended scraper and has a converging working edge on the opposite end. The larger scraper is buff and brown chert, the smaller is pink and brown banded chert. The two specimens are 43.5 mm and 29 mm in length, 27 mm and 21 mm in width, and 15 mm and 7 mm in thickness.

Bifaces:

Three bifaces collected from the site are all rounded basal fragments. The two largest specimens are gray chert, the smallest is pink and white chert. Lengths are 23.5 mm, 23.5 mm, and 29.2 mm; widths are 18 mm, 25.2 mm, and 26.2 mm; and thicknesses are 4.2 mm, 8 mm, and 7.1 mm.



actual size

FIGURE 33. Projectile Points Recovered from the Surface of 13AN71

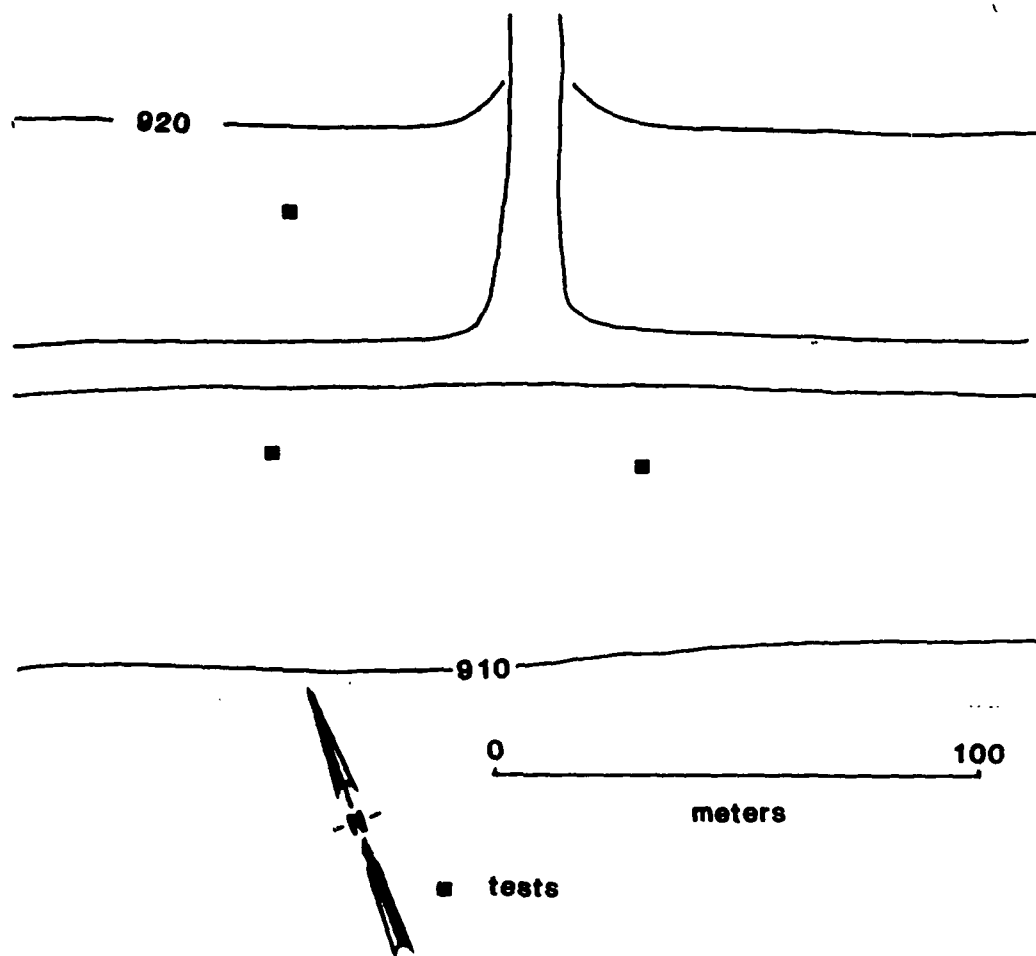


FIGURE 34. Location of Test Excavations at 13AN71

13AN72

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	907
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Mouth of Jackson Branch where it joins the South fork of the Chariton River
Estimated Size	100 m along shoreline
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Unknown
Investigations	Survey, testing
Materials Collected	149 flakes
Sites or Findspot within 400 m	None
Recommendations	No further investigations

Artifacts were found along a point of land north of the marina in south fork Area. Testing failed to indicate subsurface levels of the site, so no additional investigations are recommended.

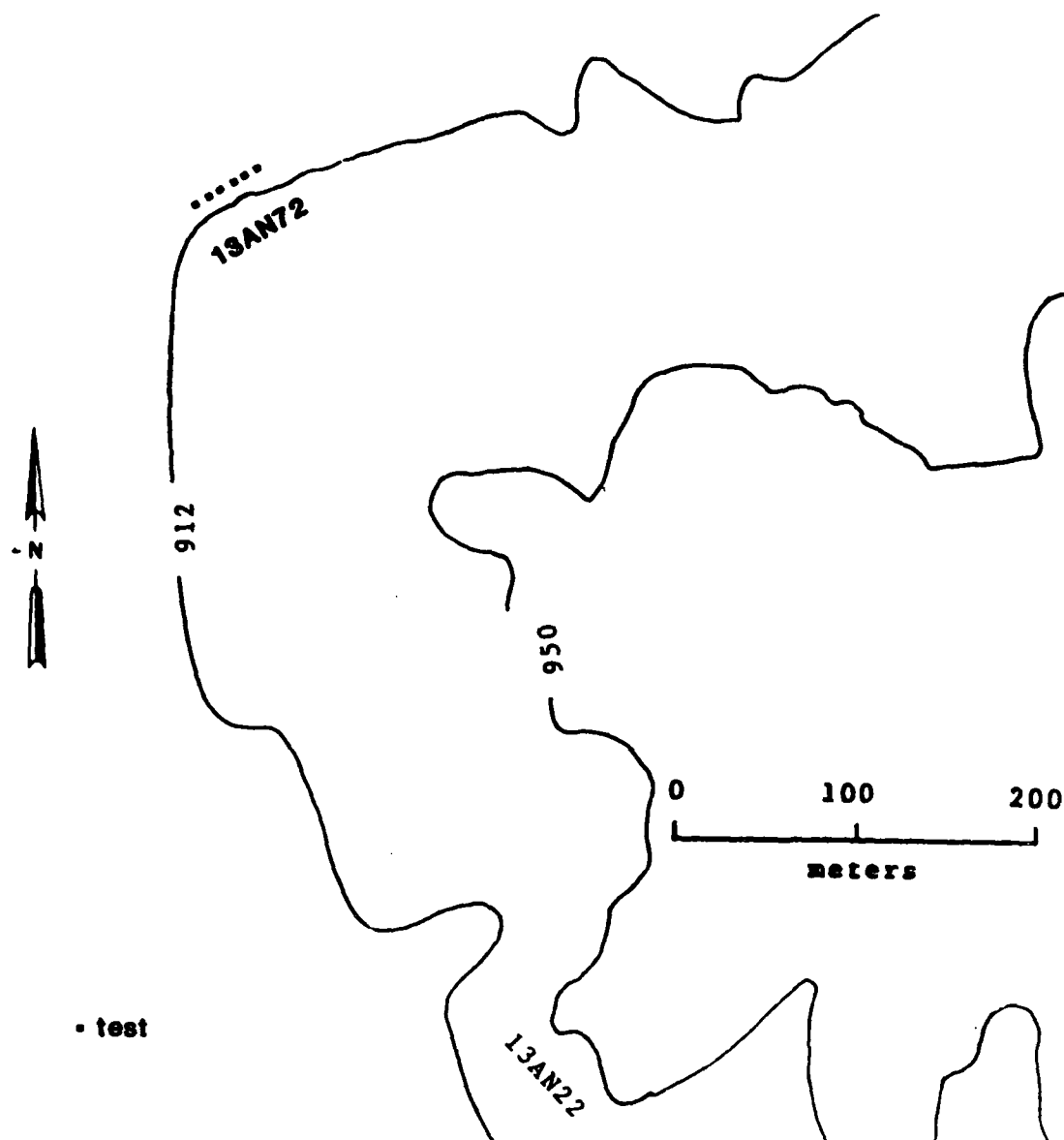


FIGURE 35. Location of Test Excavations at 13AN72

13AM73

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Near the narrowest segment of the north fork valley near the confluence of the two forks of the Chariton River
Estimated Size	100 m along the beach
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Woodland
Investigations	Survey
Materials Collected	184 flakes, 5 sherds, 2 scrapers, 1 biface, 1 projectile point
Sites or Findspots within 400 m	USD35, USD37, USD38
Recommendations	Revisit to determine if anything remains

This site is located at the tip of a point of land one mile upstream from the confluence of the north and south forks of the reservoir and is on the south shore of the north fork. The location was formerly a tributary valley near where a small stream joined the main channel of the Chariton River. Weathering of the sherds suggests movement by water.

ARTIFACTS

Projectile Points:

One broken projectile point was found at this site (Figure 37a). This specimen has a broken base and appears to have been reworked at the tip. It is made of pink and white chert and measures 31.4 mm in length, 32.7 mm in width, and 6.9 mm in thickness.

End Scrapers:

Two end scrapers were recovered from this site. One is a "thumbnail" scraper with converging lateral margins, the other is a rounded fragment of a larger specimen (Figure 37b). The smaller scraper measures 26.1 mm in length, 23.3 mm in width, and 5.8 mm in thickness. Raw material is pink and gray chert. The larger of the two is light pink mottled chert and measures 23.3 mm in length, 31 mm in width, and 6.5 mm in thickness.

Bifaces:

A single biface was found at this site. It has sinuous edges and is roughly ovoid in outline. Finer marginal retouch is lacking, suggesting that the piece may have been a preform. The specimen measures 48.8 mm in length, 32 mm in width, and 15 mm in thickness.

Ceramics:

13AN73 ceramics include five body sherds. Four sherds are very weathered and range from 6.6 to 8 mm in thickness. One sherd (Figure 37c) has several, deep, weathered lines which may be large cord or cord-wrapped stick impressions but are so weathered that any further suggestion as to their nature would be purely speculative.

13AN74

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Chariton valley edge where the north and south forks converge
Estimated Size	50 m along shoreline
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Woodland
Investigations	Survey, testing
Materials Collected	282 flakes, 20 sherds, 4 projectile points
Sites or Findspots within 400 m	USD63
Recommendations	No subsurface materials, no further investigations

This site is located on a point of land at an elevation above but near the former confluence of the north and south forks of the Chariton River. The location was tested to determine the subsurface nature of the deposit. Six tests, one of which was excavated to a depth of 1 m, failed to produce cultural materials below the immediate surface of the ground. Test excavations measured 50 cm square and were placed at 20 m intervals in the area of the site.

13AN74 ARTIFACTS

Projectile Points:

Three projectile point fragments and a complete specimen were found at this site, one and a base broken at the notches. The specimens measure:

Specimen No.	Length	Width	Thickness
1 (tip)	35.1	18.3	5.9
2 (base)	22.0	28.2	6.7
3 (tip)	15.3	11.2	3.0

The largest fragment (Figure 37d) is made of grainy gray chert, the smallest is of white and brown speckled chert. The other (Figure 37e) is banded shades of brown, orange and purple. The base (Figure 37f) measures 12.6 mm in length, 25 mm in width, and 7.6 mm in thickness. This specimen was either corner or side notched and is made of grainy gray chert.

A complete specimen also found is sided notched and is made of pink chert. It measures 32.5 mm in length, 20 mm in width, and 6.5 mm in thickness.

Ceramics:

13AN74 collections include a total of 17 body sherds with no surface treatment. The sherds that can be measured for thickness range from 5.1 mm thick to 9.5 mm thick. Four of these sherds could not be measured for thickness because one surface had completely exfoliated. Three sherds are cord marked body sherds deteriorated when the impression was tried.

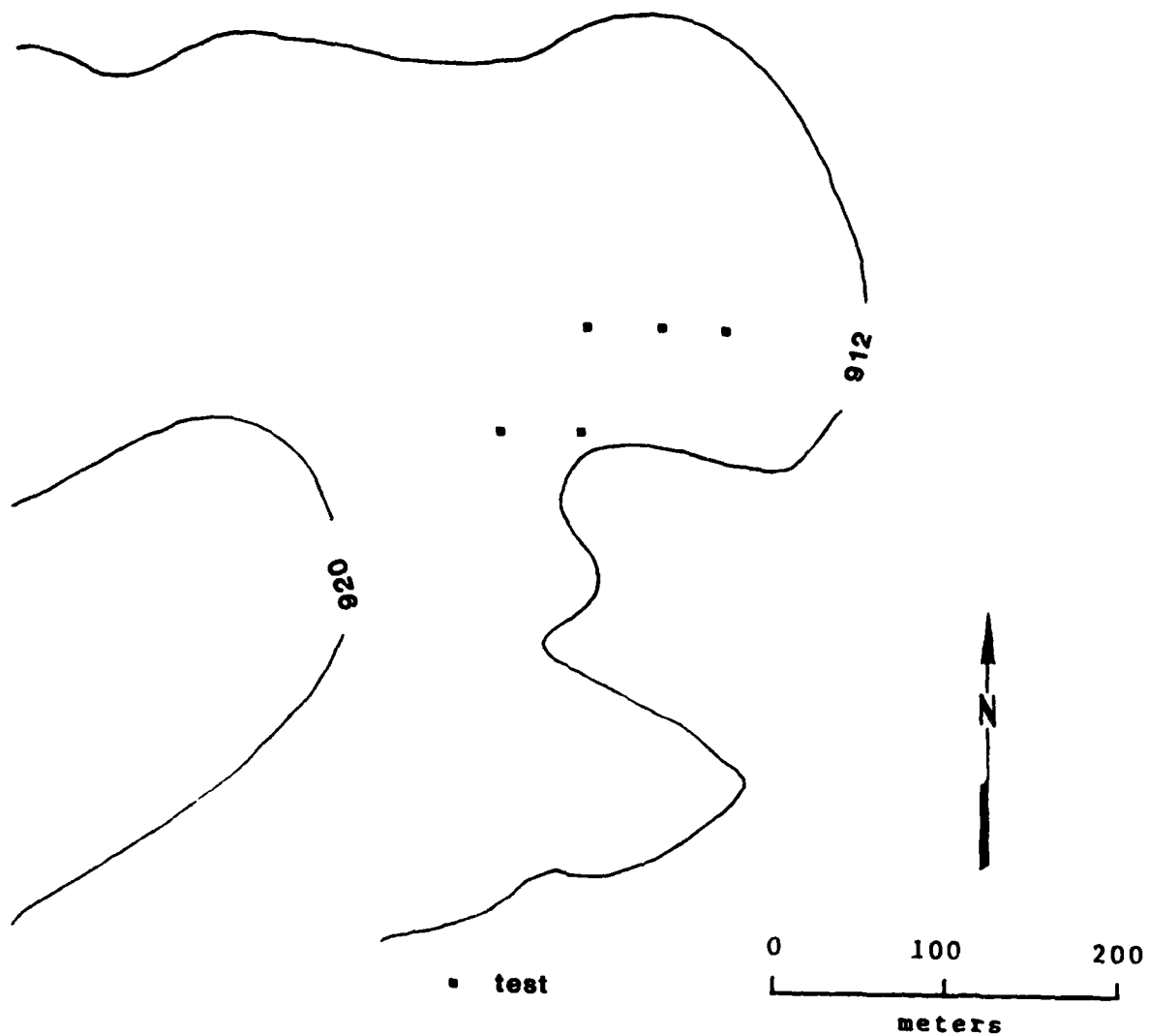


FIGURE 36. Location of Test Excavations at 13AN74

13AN75

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Artifact scatter
Present Topography	Clay Beach
Original Topography	Sloping land at the edge of the valley of the north fork of the Chariton river
Estimated Size	At least 100 m along beach
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey, testing
Materials Collected	123 flakes, 2 projectile points, 2 end scrapers, 1 preform, 1 ground stone axe, 1 hematite fragment, 1 biface fragment
Sites or Findspots within 400 m	USD53
Recommendations	Monitor to determine source of materials

This site was tested with a series of six, 50 cm square tests, one of which was excavated to a depth of at least 1 m below ground surface. No subsurface materials were recovered from the tests supporting a recommendation of no further investigations.

ARTIFACTS

Projectile Points:

Two complete specimens were collected from this site. Both of the specimens are corner notched. One is made of grainy gray chert with orange stains (Figure 37g) and the other is of banded gray chert (Figure 37h). Lengths of the two specimens are 45 mm and 36.3, widths are 29.4 mm and 19.5 mm, thicknesses are 9.5 mm and 4.8 mm.

Bifaces:

A rounded biface fragment found at the site is red and pink chert and measures 30.1 mm in length, 19 mm in width, and 10.1 mm in thickness.

Scrapers:

One scraper fragment from this site has steep marginal retouch. The white chert specimen is 32.3 mm in length, 23.6 mm in width, and 8.2 mm in thickness. Another complete thumbnail scraper from this site is made of pink chert and is 25.5 mm in length, 25.9 mm in width, and 12 mm in thickness.

Preforms:

An ovate preform was collected. The specimen is of gray and pink chert and measures 60 mm in length, 39 mm in width, and 15 mm in thickness.

Ground stone axe:

The ground stone axe from this site has been ground only on the poll end and bears the trace of the groove. The bit end has been broken resulting in a series of step fractures on that end. This specimen is made of green diorite and measures 145 mm in length, 71 mm in width, and 36 mm in thickness.

Ground Hematite:

A single tapered piece of worked hematite from this site has a triangular cross-section and is faceted on three sides. The specimen measures 35 mm in length, 16.3 mm in width, and 11.2 mm in thickness.



a
13AN73



b
13AN73



c
13AN73



d
13AN74



e
13AN74



f
13AN74



g
13AN75



h
13AN75

actual size

FIGURE 37. Artifacts from Rathbun Shoreline Sites

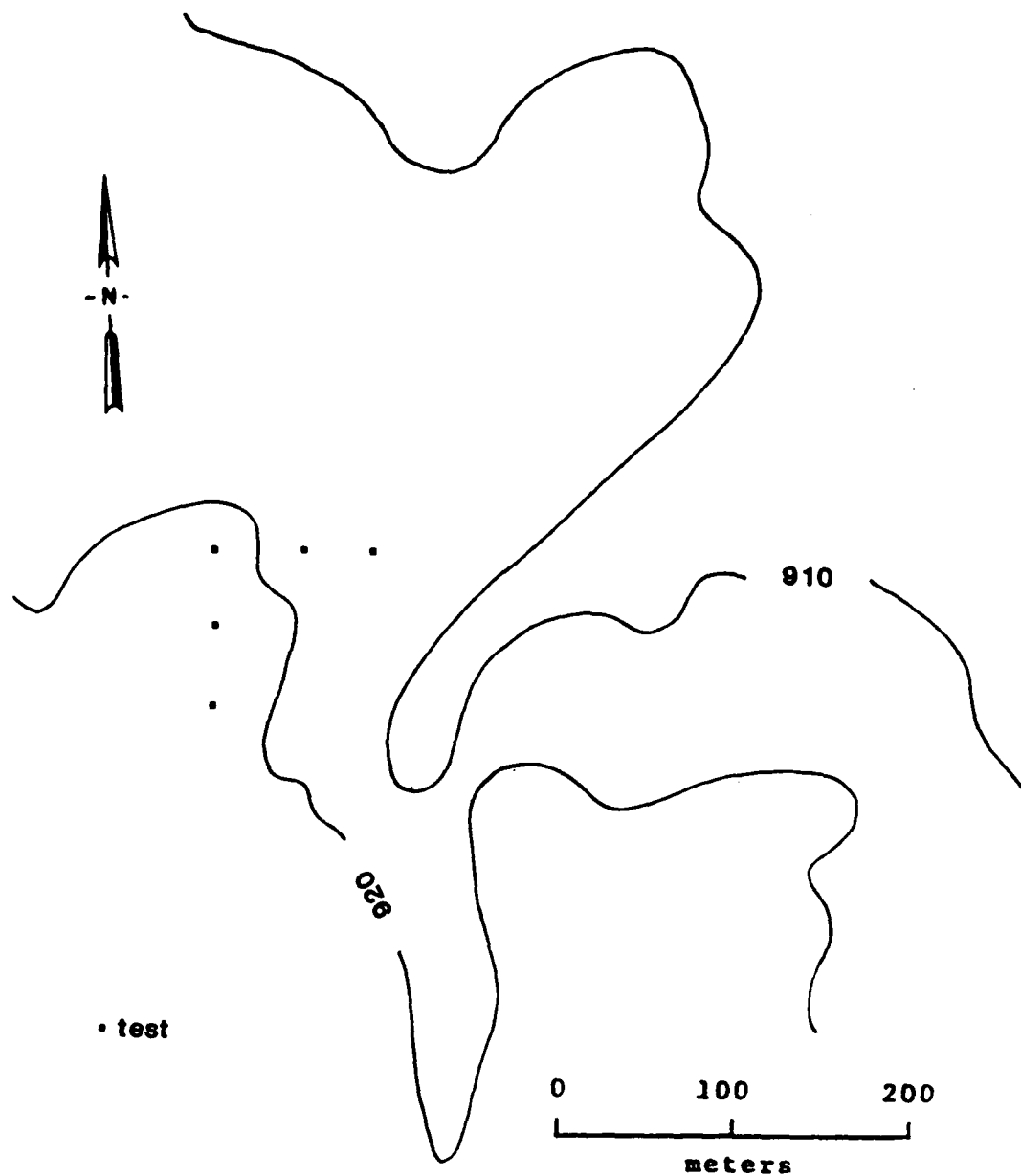


FIGURE 38. Location of Test Excavations at 13AN75

13AN76

Map Reference	USGS RUSSELL 1:62500 1935
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	On a point of land at the edge of the Chariton River valley
Estimated Size	100 m x 12 m
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Archeic based on point styles
Investigations	Survey
Materials Collected	125 flakes, 3 projectile points, 1 biface
Sites or Findspots within 400 m	None
Recommendations	Monitor to determine the source of materials

Artifacts were found along the west side of a small cove on the north shore of the reservoir. The density of materials recovered from this site warrants additional investigations there in the form of monitoring and subsequent reevaluation if materials continue to appear in the area.

ARTIFACTS

Projectile Points:

Three specimens, two of which are complete, were found at this site. A complete corner notched specimen (Figure 39a) is 29.2 mm in length, 23.4 mm in width, and 7.3 mm in thickness. It is made of yellow chalcedony. A complete stemmed point is made of gray and pink coarse grained chert (Figure 39b). It measures 34 mm in length, 17.4 mm in width, and 8.6 mm in thickness. The incomplete specimen is made of orangish flecked chert and measures 24.7 mm in length, 23.3 mm in width, and 8 mm in thickness.

Bifaces:

A rounded biface base fragment was collected from this 13AN76. The red and white chert specimen is 40.5 mm in length, 34 mm in width, and 10 mm in thickness.

13AN77

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Tip of a point of land extending from the valley edge into the floodplain of the south fork of the Chariton River
Estimated Size	120 m x 12 m
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	166 flakes, 2 projectile points, 3 scrapers, 1 retouched flake
Sites or Findspots within 400 m	USD70, USD72, 13AN30
Recommendations	Monitor to determine source of materials

This site is approximately 800 m upstream from the former confluence of the forks of the Chariton River and is on the north shore of the south fork.

13AN77 ARTIFACTS

Projectile Points:

Two fragments of large projectile points were found at this location. The larger specimen is a broken base (Figure 39c). The raw material is dark gray and brown chert. The specimen is corner notched and measures 29.9 mm in length, 26.4 mm in width, and 6 mm in thickness. The smaller specimen (Figure 39d) may have been deeply corner notched or tanged. It is dark gray and pink chert, is broken at the base and the tip, and measures 23 mm in length, 23.7 mm in width, and 6.4 mm in thickness.

Scrapers:

Three endscrapers were collected from this site. The first of these is a rust and gray specimen with margins converging toward the tip. One margin has steep retouch adjacent to the scraping end of the tool. Cortex appears on both sides of the specimen. The scraper measures 38.5 mm in length, 31.4 mm in width, and 12.4 mm in thickness. The second specimen is a small thumbnail scraper of red chert which measures 19.2 mm in length, 20.5 mm in width, and 8.3 mm in thickness. The third specimen is made of red and pink chert. It is broken and measures 34.5 mm in length, 26.1 mm in width, and mm in thickness.

Retouched Flakes:

A single specimen measuring 18.3 mm in length, 10.8 mm in width, and 3 mm in thickness and is made of white chert. The flake is a rounded fragment with retouch over the all of the margins.

13AN78

Map Reference	USGS PLANO 7.5 min Quadrangle
Elevation	906
Type of Remains	Lithic scatter
Present Topography	Clay Beach
Original Topography	Mouth of a tributary valley where that valley joins that of the south fork of the Chariton River
Estimated Size	100 m along beach
Surface Visibility	Excellent, eroding surface
Site Condition	Eroding surface
Cultural Affiliation	Unknown, no diagnostic materials
Investigations	Survey
Materials Collected	214 flakes, 2 projectile points, 1 biface
Sites or Findspots within 400 m	USD72, USD89, USD91
Recommendations	Monitor to determine source of materials

This site is located along the end of a point of land extending into the reservoir from the south shoreline of the south fork of Rathbun Lake. The location is what was formerly the confluence of a small tributary stream and the south fork of the Chariton River.

ARTIFACTS

Projectile Points:

The two broken fragments of projectile points are too fragmentary to allow assignment to any typological category based on margin configuration or hafting element. One of the specimens is a basal fragment (Figure 39e) of a possible side notched point which measures 12.2 mm in incomplete length, 21.8 mm in width, and 5.8 mm in thickness. The other specimen (Figure 39f) is a medial fragment of a tanged or corner notched point which measures 24 mm in length, 19.5 mm in width, and 5.6 mm in thickness.

Bifaces:

A small ovate biface made of pink chert was found at this location. The specimen has a large protrusion, suggesting that it may have been rejected during manufacture. It measures 41 mm in length, 25 mm in width, and 11.1 mm in thickness.



a

13AN76



b

13AN76



c

13AN77



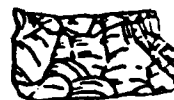
d

13AN77



e

13AN78



f

13AN78

actual size

FIGURE 39. Artifacts from Rathbun Shoreline Sites

SUMMARY

A total of 96 findspots and 8 sites were recorded along the 155 miles of shoreline surveyed during the 1979 investigations at Rathbun Reservoir.

There were 16 isolated findspots which consisted of single tools or flakes. By far the most represented category of findspot was the 48 locations which produced between two and 10 artifacts. A gap exists between the smaller and the largest findspots; there are only 13 findspots with between 26 and 100 artifacts. Locations which produced more than 100 artifacts were assigned site numbers; the eight sites were assigned designations 13AN71 through 13AN78.

1. 16 isolated findspots where single items were recovered
2. 48 artifact and flake scatters with from 2 to 10 artifacts
3. 19 artifact and flake scatters with from 11 to 25 artifacts
4. 13 artifact and flake scatters with from 26 to 100 artifacts
5. 8 artifacts scatters with more than 100 items

Cultural affiliations of the 104 findspots is difficult to ascertain. The nine sites where ceramics were recovered have been assigned a Woodland affiliation. One findspot was assigned an Archaic affiliation based on the presence of a stemmed projectile point recovered from the surface there. Another was assigned a Late Woodland affiliation on the basis of projectile point similarities with those from northeastern Missouri.

The predominant type of material recovered at shoreline sites and findspots was chipping waste. In all 41 projectile points, 14 endscrapers, and 30 other lithic tools were recovered from the 155 miles of shoreline surveyed. Only nine findspots yielded ceramics; the ceramic sample from shoreline findspots is 17 sherds. One of the 31 tested sites, 13AN45, produced a surface collection of 123 sherds, demonstrating that ceramics are present in quantity in the area.

Artifacts recovered from shoreline findspots are generally incomplete or broken specimens. For example, only 14 of the 42 projectile points recovered were complete. The ceramics sample recovered was primarily small eroded and battered specimens.

Nearly one-half of the 41 projectile points recovered from the shoreline of the reservoir were from the largest collections of material. 13AN71 and 13AN73 produced 25 percent of all the projectile points recovered along the entire shoreline. The 14 end scrapers were in all but two cases associated with other non

projectile point lithic tools. In only one instance was a scraping tool associated with ceramics. Three-quarters of all the scrapers recovered from the shoreline were from larger sites.

Recommendations were based on the quantities of materials recovered from findspot or site and the density of artifacts in shoreline locations. Findspots larger than 50 items are recommended for monitoring to determine if subsurface materials will be eroded from any of the locations. Monitoring is also recommended for all the shoreline sites recorded in 1979. Further investigations in the form of testing at the larger occupations is not recommended, since four of the sites were tested with no evidence of subsurface material.

PART III.
PUBLIC USE AREA SURVEY

INTRODUCTION

The survey of a 30 percent sample of each of the eight public use areas at Rathbun Reservoir was based on a series of randomly selected blocks 200 m on a side. Blocks were deemed more practical than transects since the terrain in each public use area would have been difficult to survey in the case of the latter. Contributing reasons for selecting blocks over transects are: irregular boundaries, modern roads and structures, and topographic features which were not linear. The method selected is economical for sampling environmental diversity such as that encountered in the rapidly fluctuating relief of the Chariton River valley (Judge, et. al. 1975). Environmental diversity is assumed to correlate with diversity in past human behavior directed at differing resources (Tiffany and Abbot 1982). Distribution of known sites in the reservoir area follows topographic features. Since the filling of the reservoir has inundated terraces and the lowest parts of sloping land at the valley edges, public use areas today consist of bench-like beaches backed by sloping land which rises to upland bluffs.

The 100 percent survey of the Rathbun shoreline followed an eroded bench along valley edges of the Chariton and its tributaries approximately midway between the elevation of the valley floor and that of the ridgetops and included a part of each of the public use areas. The public use area survey intentionally crosscut all variation in relief not inundated. The surveyed blocks frequently overlapped with beaches. The purpose of sampling is to determine where sites are located, not to find sites.

Survey crew members walked abreast at from four to six m intervals through each of the blocks until all the selected area was surveyed. Each of the blocks represents approximately 1.5 percent of a square mile. A total of 64 such adjacent 200 m blocks per square mile were possible. To obtain a 30 percent random sample of blocks in each public use area random numbers were generated for each square mile of public use area and blocks selected from a grid of 200 m squares aligned over topographic maps.

A short BASIC program was designed to generate a series of random numbers for block selection. A TRS-80 microcomputer using Level II BASIC was used to generate random numbers between 1 and the 64 which were needed for the 30 percent sample. A grid was superimposed over a map of each public use area with numbers ranging from 1 to the total number of blocks. Randomly selected blocks were indicated on the grid. The survey crew was then transported to the field and instructed to examine the ground surface orienting on a selected landmarks. Distances were paced and compasses were used to align block margins in the absence of well-defined and visible landmarks noted on USGS topographic maps. Block locations are presented in Appendix D. Locations

for each section where a randomly selected block was surveyed are shown.

The selection of a 30 percent sample of blocks within the bounds of each of the eight public use areas in Rathbun Reservoir, however, represents an ideal. The process of locating previously recorded sites earmarked for testing necessitated the survey of other large blocks land in each of the public use areas. Most of the previously recorded sites to be tested in public use areas were small, difficult or impossible to locate lithic scatters. As a consequence, large areas outside or overlapping the randomly selected blocks were intensively surveyed. Other segments of public use areas not included in the random samples, but intensively surveyed are the 10 to 12 meters of beach contained within some of the blocks. The 100 percent intensive survey of the shoreline of each of the public use areas constitutes a sizeable surface area. Only short segments of the shoreline are included in each of the randomly selected blocks where the sampling units terminate at the water's edge. The shoreline survey and the reconnaissance associated with establishing locations of sites to be tested nearly doubled the amount of area surveyed in each public use area. Results of additional survey associated with the location of previously recorded sites, however, were similar to those obtained by use of random blocks; no new sites or findspots were located. The shoreline survey, however, resulted in the recording of the number of findspots listed below:

TABLE III.
SHORELINE FINDSPOTS AND SITES
IN PUBLIC USE AREAS

Area	Shoreline Findspots or Sites
Buck Creek	9
Honey Creek State Park	5
Bridgeview	5
South Fork	1
Island View	6
Glenwood Area	1
Rolling Cove	3
Outlet	0

Most of the shoreline findspots are either isolated finds of single items or are those where less than 10 flakes were collected. The only substantial scatter of materials that was found to overlap both the randomly selected blocks and that conducted along the shorelines was at Bridgeview Area.

BUCK CREEK AREA

Buck Creek Area is a 996 acre public use area situated on the extreme northeastern shore of Rathbun Lake and is adjacent to the north end of the dam. The terrain in the park is hilly, and the valley of what was once Buck Creek divides the park into western and eastern halves. The former channel of the Chariton River borders the park on the west; presently this area is open shoreline interspersed with coves which are remnants of tributary valleys joining that of the Chariton. Recently, construction of roads, boat ramps, picnic shelters, parking lots, and other modern facilities has disturbed the western half of the park. Since most of the area was farmed prior to the construction of the reservoir, hill slopes and ridge tops have been disturbed by erosion. Presently, the effect of erosion on many of the hillsides has been reduced due to the presence of a heavy cover of vegetation.

Archaeological investigations in the Buck Creek Area were conducted in three parts during the 1979 fieldwork: a 100 percent survey of the shoreline between the 902 and the 912 ft contour intervals, a 30 percent survey of the public use area proper, and testing of four previously recorded sites in the park; 13AN25, 13AN26, 13AN27, and 13AN202 (Figure 40).

SURVEY

Twenty -five of the 75 blocks defined for Buck Creek area were surveyed. No additional sites were recorded. Nine findspots were recorded for the shoreline of Buck Creek Park (USD1 through USD9). For the most part, findspots in the Buck Creek area were lithic scatters with less than 10 flakes and only occasionally occurring tools. All findspots recorded in the Buck Creek Park are at elevations of from 20 to 60 ft less than those of previously recorded sites in the uplands. This suggests the possibility that some of the materials collected from the shoreline could be secondary deposits originating at upslope sites.

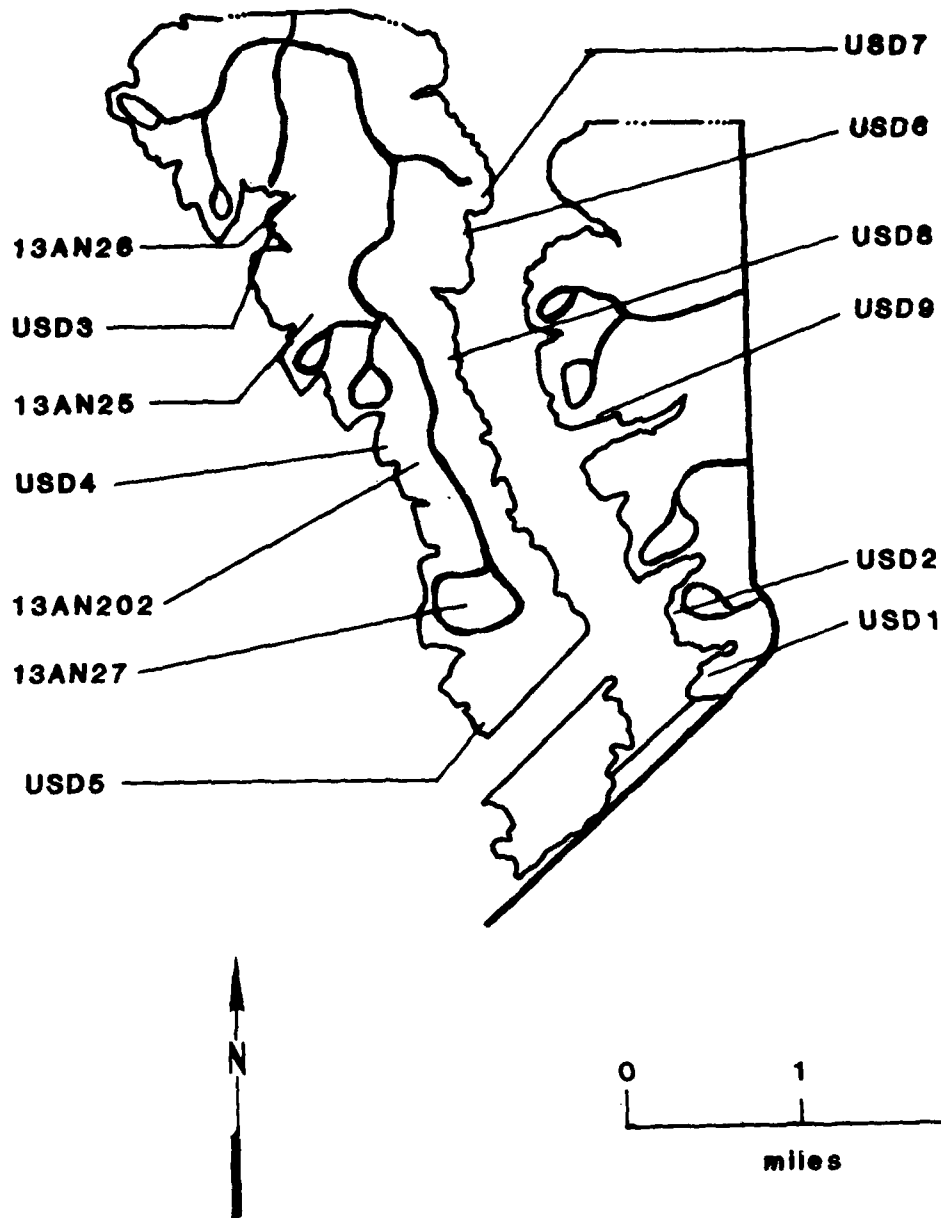


FIGURE 40. Buck Creek Area Findspots and Sites

BRIDGEVIEW AREA

Bridgeview Area is located on the north shore and across from the juncture of the north and south forks of Rathbun Reservoir. This park consists of 610 acres abutting the shoreline on all but the north side (Figure 41). Construction activity in the park has been extensive with roads, picnic shelters, vault toilets and showers installed throughout the length of the park, but which are concentrated in the western parts of the recreation area. 13AN17 is located in the eastern margins of the park where construction activities have had the least impact. Wave action, however, has produced steep banks in the eastern parts of the area.

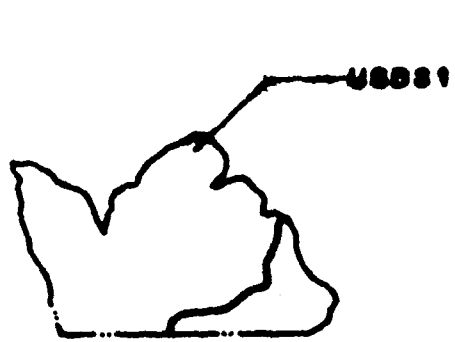
SURVEY

Twenty-three blocks 200 m on a side were surveyed in Bridgeview public use area. Four findspots and 1 site were recorded for the shoreline of Bridgeview Area: USD22, USD23, USD24, USD25 and 13AN71. Two previously recorded sites (13AN17 and 13AN16) are also located within the boundaries of this recreational area. The site which was recorded in this public use area, 13AN71 produced artifacts in quantities which warranted further testing. All other findspots along the shoreline of Bridgeview Area produced collections of less than 10 flakes. Recommendations are that no further investigations are warranted at any of the findspots in Bridgeview Area.

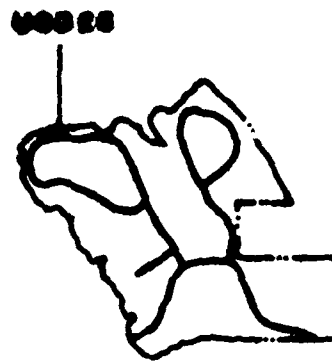
GLENWOOD AREA

Glenwood Area is one of the smallest in the reservoir area, having only 148 acres (Figure 41). This park is located across a large cove from South Fork Area. Each of the two parks mentioned above are at the former mouth of a major tributary of the Chariton River, Jackson Branch.

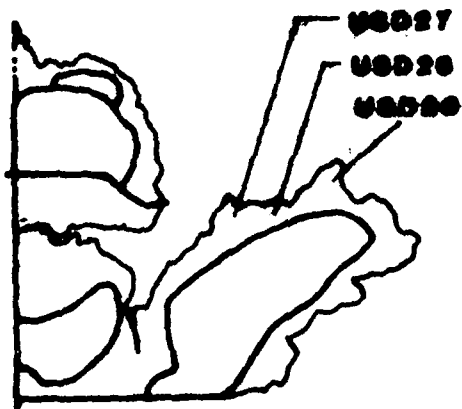
Seven randomly selected 200 m blocks were surveyed in Glenwood public use area. The only materials recorded were along the shoreline. Two findspots recorded on the shoreline of this public use area produced collections of lithic materials and ceramics. Although approximately 40 percent of the area was surveyed when the shoreline is included, no other findspots were found in the public use area proper.



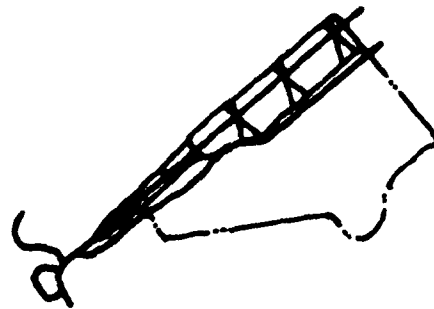
GLENWOOD AREA



SOUTH FORK AREA



ROLLING COVE AREA



OUTLET AREA

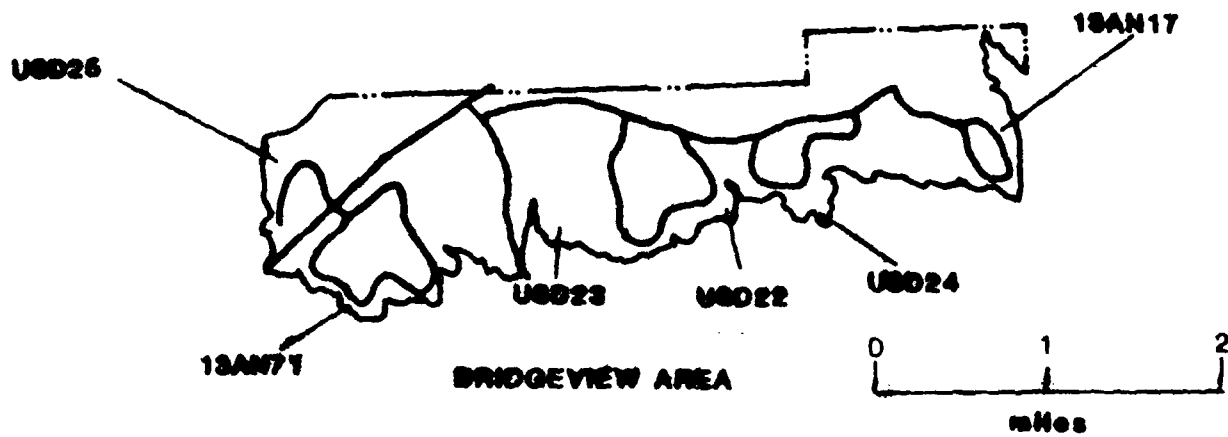


FIGURE 41. Rathbun reservoir Public Use Area Findspots

HONEY CREEK STATE PARK

Honey Creek State Park is a peninsula jutting southwestward into the central part of the main body of Rathbun Lake. Since this park, like Buck Creek, is between two former stream channels, the terrain is hilly. For the most part, the 798 acre park is an east-west trending series of ridges and hillsides with major slopes to the south and north (Figure 42). Erosion of the southern edge of the park by wave action has removed an estimated 30 meters of the southernmost margins of the park and has produced steep-sided banks in that area. As at other public use areas at Rathbun Lake, the 1979 investigations at Honey Creek State Park were concentrated in three areas: a 100 percent shoreline survey of the margins of the park; a 30 percent survey of the park itself; and testing at six previously recorded sites which are within the park boundaries, 13AN1, 13AN2, 13AN3, 13AN4, 13AN207, and 13AN208, to determine their eligibility for the National Register of Historic Places. Although approximately 40 percent of the park was surveyed and auger holes were drilled throughout Honey Creek State Park, no additional sites were found within the boundaries of this public use area other than those found during the shoreline survey.

SURVEY

Although 32 randomly selected 200 m blocks were surveyed in Honey Creek State park, no materials were recovered. Artifacts were found at five locations along the shoreline bordering Honey Creek and were assigned findspot designations USD10 through USD14. Since none of the findspots appeared to be a primary deposit, site numbers were not assigned to any of the findspots. Materials collected ranged from isolated finds, with no other associated artifacts, to artifact scatters of both tools and waste flakes.

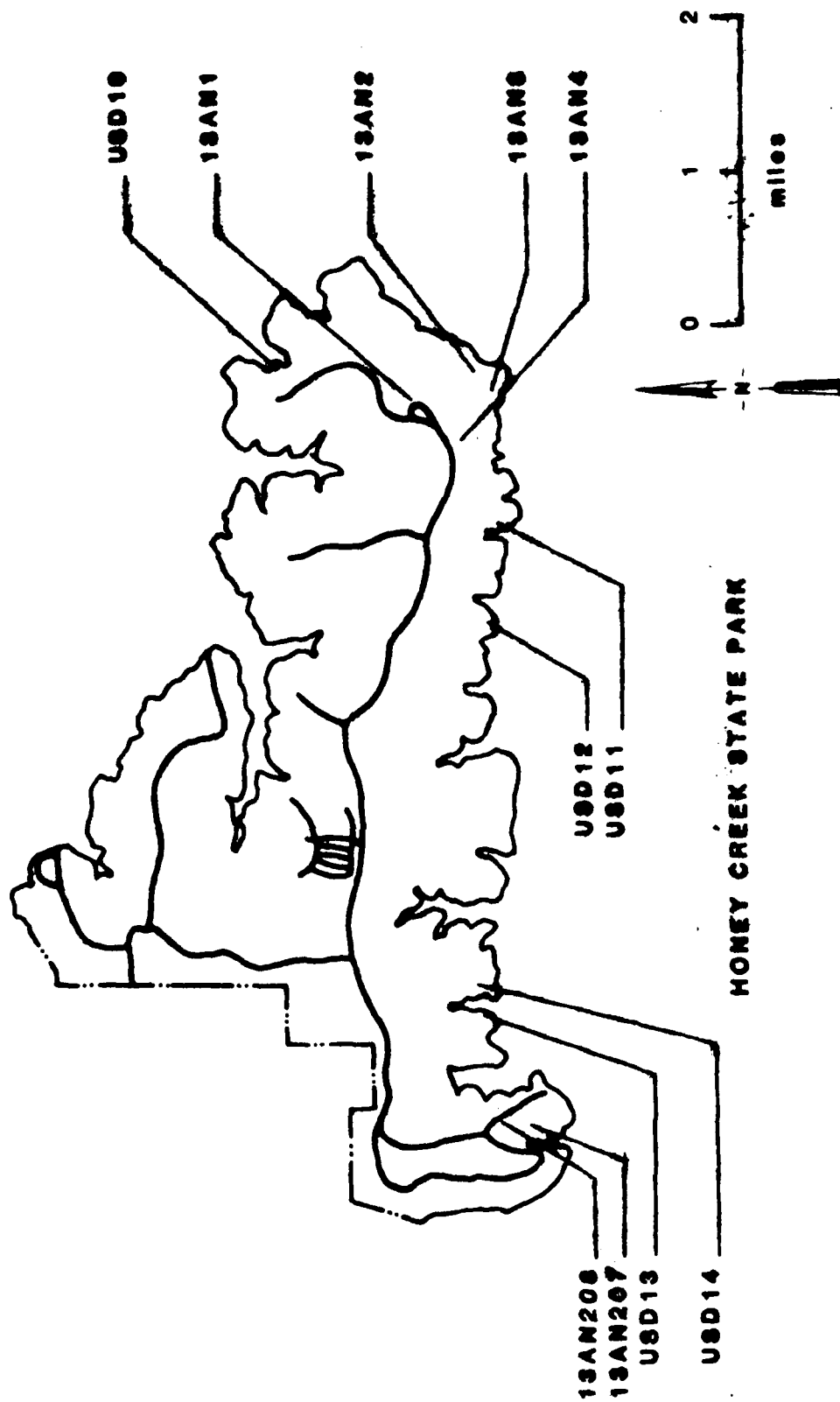


FIGURE 42. Honey Creek State Park Findspots and Sites

ISLAND VIEW AREA

Island View Area is the largest public use area located in Rathbun Reservoir covering approximately 1392 acres. This area is situated on the southern shore of the main body of Lake Rathbun and is at the south end of the dam. Terrain in the area is undulating due to the presence of five former stream valleys which appear today as coves (Figure 43). The area is bordered on the north by the lake shore, on the west by a cove, on the south by fields, and on the east by land which abuts the dam. The construction of roads, boat ramps, picnic shelters, parking lots, and other modern facilities has disturbed much of the area within the park. Land leveling and road building activities have disturbed the ground surface. Since most of the area was farmed prior to the construction of the reservoir, the hill slopes appear to have been disturbed by erosion. Investigations in Island View Area were in three parts: a 100 percent survey of the shoreline between the 902 and the 912 contour intervals, a 30 percent survey of the recreational area proper, and testing of one previously recorded site, 13AN201, in the recreational area.

SURVEY

Forty-eight randomly selected 200 m blocks were surveyed in Island View public use area. During survey of the shoreline of this part of the reservoir, six findspots were recorded (USD15 through USD20). All the findspots which were recorded for this part of the reservoir consisted of small thin scatters of less than 10 flakes, with the exception of USD15 where larger quantities of cultural debris were encountered along the surface of the shoreline. No material was recovered from the randomly sampled areas of Island View Park proper.

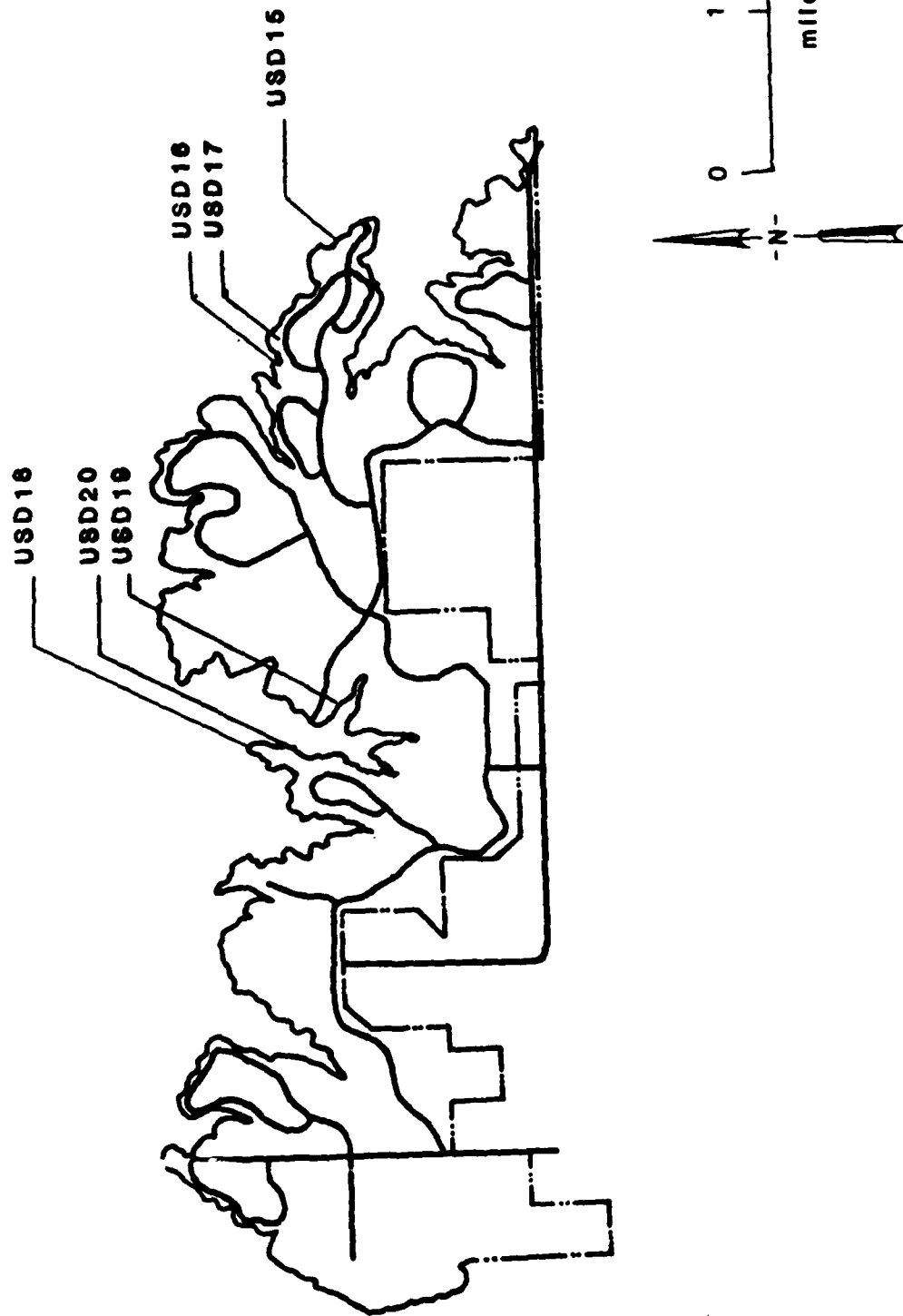


FIGURE 43. Island View Public Use Area Findspots

ROLLING COVE AREA

Rolling Cove Area is located on the south shore of the main body of Lake Rathbun. This public use area is approximately 375 acres in size. The terrain in Rolling Cove consists mainly of a gradual slope toward the north and the lakeshore. A single cove divides the park into northwestern and southeastern halves. Findspots were found only on the southeastern shoreline of this cove.

SURVEY

Eleven randomly selected 200 m blocks were surveyed in this public use area. No sites were recorded, although three findspots were recorded during the shoreline survey. Materials recovered from the findspots are few; eight flakes were recovered from the most prolific location. No further investigations are recommended for any of the three findspots found in Rolling Cove Area.

A series of 21 auger tests were placed at the southern and eastern limits of the Rolling Cove Area during the 30 percent survey conducted there. Surface visibility within the park was good with areas near roads and the shoreline lacking a heavy cover of vegetation. No cultural remains were found in Rolling Cove Area other than the three findspots recorded along the shoreline.

SOUTH FORK AREA

This public use area is one of the smaller ones in the Rathbun Reservoir area and contains only 156 acres. The main body of the park is on a point of land which protrudes from the south shoreline into the south fork of the reservoir. The park is surrounded by beach; only the eastern side lacks a shoreline. Road construction, a boat ramp, showers, vault toilets, camping areas, and picnic shelters have disturbed approximately 50 percent of the park.

SURVEY

Six randomly selected 200 m blocks were surveyed in this public use area. A single site, 13AN72, was recorded along the shoreline within the confines of South Fork Area. Surface materials appeared at the findspot in quantities which were greater than from most of the other findspots in the reservoir area, so it was decided to test the location. Five 1 m squares were excavated at 20 m intervals along the shoreline to determine the subsurface nature of the artifact concentration at 13AN72. As at other findspots tested in the area, no subsurface materials were found below the upper 10 cm of the deposit.

OUTLET AREA

Outlet area is the smallest of the public use areas at Lake Rathbun. Located below the dam, this area is adjacent to the channel of the Chariton River. Although Outlet Area has no lake shoreline, it is transected by the steep banks of the the Chariton River below the reservoir spillway. Since the area is so small, transects were walked the length of it. A 50 percent survey consisting of eight such transects produced no evidence of archaeological materials.

SUMMARY

The 30 percent survey of public use areas was in actual terms a survey of much larger areas. This was due to the length of shoreline surveyed within the boundaries of each of the recreation areas. However, no new sites were recorded in non-shoreline portions of any of the public use areas. Although twenty-nine findspots and 1 site were recorded for the shorelines of the eight public use areas sampled, the randomly selected blocks did not produce additional sites.

The survey results for the public use areas is not surprising given the density of findspots and sites along the shoreline of the reservoir. With the exception of the Buck Creek area, the larger public use areas are all located where site density defined for the shoreline sites is not the highest. As well, most of the larger public use areas within the reservoir area have been surveyed during previous investigations and sites there reported.

A summary of the numbers of 200 m blocks surveyed in each public use area are as follows:

TABLE IV.
NUMBERS OF BLOCKS SURVEYED
IN RATHBUN PUBLIC USE AREAS

Area	Number of Blocks
Buck Creek	25
Honey Creek	31
Bridgeview	23
South Fork	6
Island View	48
Glenwood area	7
Rolling Cove	11
Outlet	50x

PART IV.

ANALYSIS OF THE SURVEY AND FINDSPOT DATA

FINDSPOT ANALYSIS

FINDSPOT REDEPOSITION

Since the shoreline survey was by definition restricted to eroded areas adjacent to a major geological agent of transport (i.e. water), the identification of the nature of the deposits represented at each of the findspots is crucial. A part of the analysis of the findspot data therefore, is directed toward the investigation of which deposits may have been reworked by erosion and conversely, which are in situ deposits. Both resource management and analytical concerns necessitate the establishment of facts concerning the primacy of shoreline deposits.

Several hypotheses and assumptions provide the basis for the analysis of findspot data which follows:

During removal and redeposition of site materials, sorting will be by artifact density. Objects with similar mass will be deposited together. It follows that at findspots where only a single class of materials is found, such as those assemblages which consist entirely of flakes, sorting and redeposition could be responsible. Conversely, at findspots where artifacts with different densities appear, materials may have been subjected to the least amount of transport.

Findspots where only a small number of artifacts have been recovered may have higher probabilities of being secondary deposits than those where larger quantities of materials appear. The transportation and redeposition of a single item out of its original context by human or natural means is more probable than for larger quantities of items. The hypothesis that the distribution of findspots with smaller assemblages will be less structured than those with larger assemblages can be tested. The internal structure of findspots or sites may be thought of as a series of relationships between different classes of artifacts such as projectile points, flakes, or ceramics. The structure of a site is a reflection of the human behavior which produced the deposit in the first place. The structure of a site is not expected to be retained if the materials have been redeposited and subjected to sorting. The structure of findspots or sites which have been disturbed will be expected to differ from those which have not when the two have been compared. The structure (co-occurrence) of various classes of material culture found insitu in findspots would be lost when those materials were redeposited. A formal hypothesis based on the assumptions listed above will lend itself to statistical testing, since findspots with one class of data may be counted and compared with those where more classes of materials appear.

The null hypothesis to be tested states that if some of the findspots recorded along the shoreline of Rathbun reservoir are redeposited, then no relationship should exist between their structure and that evident at findspots where artifacts of different densities have been collected. Findspot structure in this instance is defined as relative frequencies of flakes collected from findspots with and without artifacts present. Do differences exist between shoreline flake scatters with and without tools, or are the differences due to sampling error?

It is also assumed that those findspots representing secondary deposition of materials will be situated in close proximity to other findspots or previously recorded sites from which the materials were derived.

Data for the testing of the first of the hypothesized conditions set out above is provided by assemblages from findspots consisting entirely of chipping debris. Counts of classes of findspot size can be compared to those containing artifacts of different weights and densities. It is assumed that quantities of flakes found in scatters consisting exclusively of chipping debris will not express the same pattern of frequencies as those of findspots where artifacts have been found if the former represent secondary deposits which have been subjected to sorting.

Chi-square analysis was selected as the most expedient way to evaluate the hypothesis of no relationship between findspot categories since the test makes no assumptions about the distribution of the data. To determine if flake scatters recorded along the Rathbun shoreline are similar in structure to the artifact scatters recorded there, the following contingency table was constructed. Isolated tool finds, have been omitted to provide the necessary minimum quantities per cell of the matrix.

TABLE V.
CONTINGENCY TABLE FOR FINDSPOTS WITH AND WITHOUT
TOOLS IN ASSOCIATION.

Class	Flake Scatters	
	with artifacts	only flakes
1 flake	5	11
2 to 10 flakes	18	30
11 to 25 flakes	13	6
26 to 100 flakes	10	3
> 100 flakes	7	1

Total sample size = 104 findspots

Chi Square = 16.070
Level of significance = .002

-----]

Results of the Chi square test show that , no significant differences can be defined between the numbers of shoreline findspots with and without artifacts. The Chi square analysis of Rathbun shoreline findspot assemblages both with and without heavier artifacts suggests that the absence of artifacts at the flake scatters may be due to sampling error. Hypothesized differences between the two kinds of assemblages (those with and those without tools or ceramics) are not statistically supported. The position that flake scatters along the margin of the reservoir are not secondary deposits is supported.

Although not a statistical test as such, the spatial distribution of findspots may be compared to determine if an hypothesized pattern expected for redeposited materials is evident. Plots of the locations for sites and findspots recorded during 1979 and those which were previously reported show a pattern of distribution along the shorelines and watercourses in the reservoir area. Sites and findspots along shorelines of the north and south forks (Figure 44) and for the main body of the reservoir (Figure 45) are shown. The distribution which would be expected if smaller deposits represent eroded and redeposited materials derived from larger ones would be one in which the larger findspots or sites would appear either downslope or upslope from isolated findspots and those with few artifacts. These expectations are not met. Another expected pattern not met is the location of clusters of small findspots near those which are larger. As is indicated by the plots of findspot locations, the relationship between smaller and larger findspots is not the pattern which would be expected from colluvial or wave transport and redeposition. Although not a statistical test as such, the distribution does lend further support to the conclusion that the findspots are mainly primary deposits. Distances between findspots are in most cases laterally across beaches at distances which exceed 100 m. Larger findspots generally are separated from smaller findspots by at least 400 m.

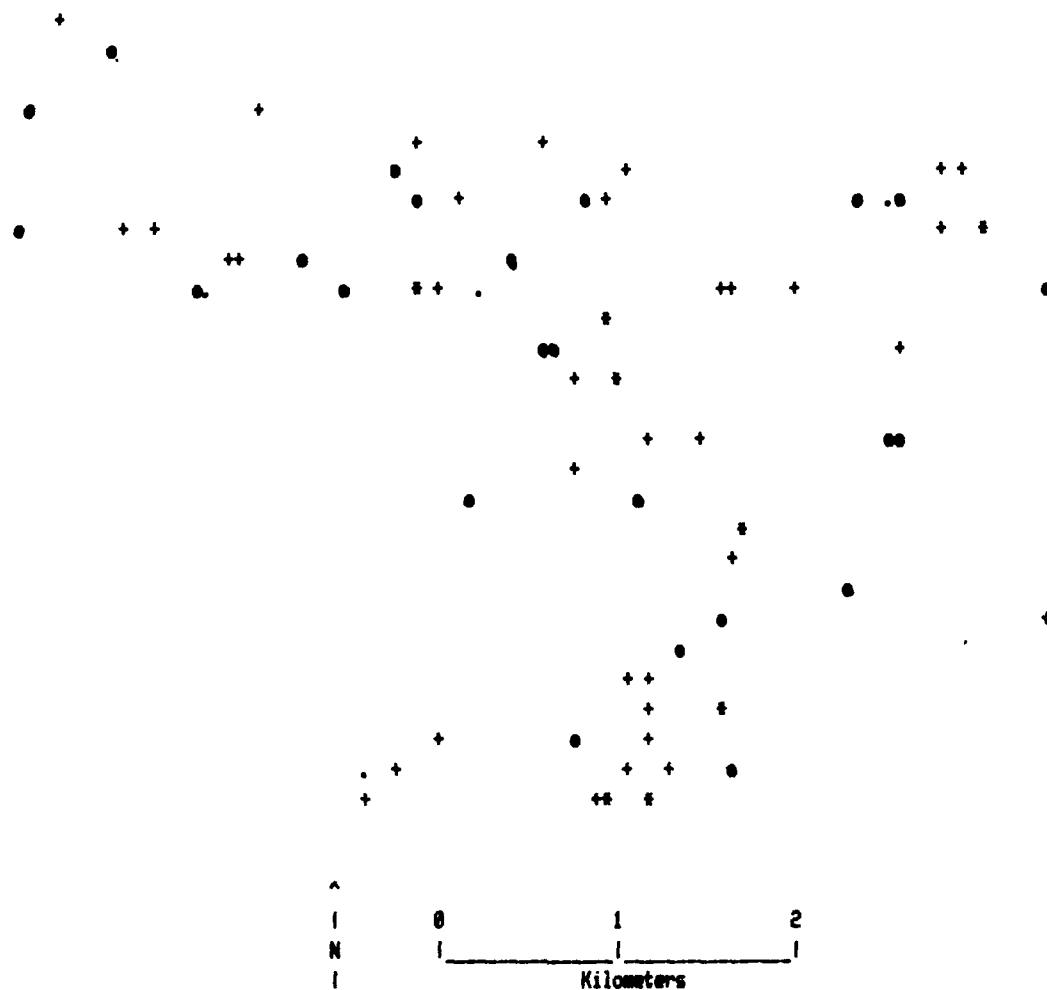


FIGURE 44. Plots of Densities for North and South Fork Findspots



SYMBOLS

- ISOLATED FINDSPOT
- + 1 TO 25 ARTIFACTS
- % 26 TO 100 ARTIFACTS
- * MORE THAN 100 ITEMS
- PREVIOUSLY RECORDED SITE

FIGURE 45. Plots of Findspot Densities for the Main Body of the Reservoir

DEVELOPMENT OF CHRONOLOGY

The development of a complete culture history for the Chariton drainage in the area of Rathbun Reservoir could not be accomplished given the nature of the deposits excavated in 1979. A lack of diagnostic artifacts necessary for the establishment of a local chronology is not a unique problem for archaeological data collected in central Iowa, however. Gourley (1983:97) experienced similar difficulty with data collected to the north of Rathbun Reservoir.

The most usable data collected during 1979 is that recovered from the shoreline survey. The majority of the findspots recorded along the Rathbun shoreline were lithic scatters consisting of small quantities of chipping debris; the other findspots produced few artifacts. Sample sizes of artifact collections from shoreline findspots are too small to satisfy the assumptions of even the most robust statistical tests. An additional problem with the artifact samples is that most of the specimens are broken to the extent that few measurements can be recorded. Many of the projectile points recovered from findspots are fragments of bases or tips. Ceramic samples are badly eroded in most cases with only 4 rim sherds recovered for the entire shoreline length.

Sites where cultural affiliations could be established by the identification of diagnostic artifacts are in the table listed below:

TABLE VI.
CULTURAL AFFILIATIONS OF
SHORELINE FINDSPOTS

Site or Findspot	Affiliation	Diagnostic Materials
2 to 10 artifacts:		
USD10	Woodland	ceramics
USD72	Woodland	ceramics
USD87	Woodland	ceramics
USD88	Woodland	ceramics
11 to 25 artifacts:		
USD35	Woodland	ceramics
USD63	Archaic	projectile point
USD68	Woodland	ceramics
USD85	Late Woodland	projectile point
26 to 100 artifacts:		
none		
more than 100 artifacts:		
13AN71	Woodland/Archaic	projectile points
13AN73	Woodland	ceramics
13AN74	Woodland	ceramics
13AN76	Archaic	projectile point

Although a specific chronology cannot be developed utilizing the all the data collected from tests and survey during the 1979 investigations, it is possible to make general statements concerning assemblage types and site locations.

Assemblage Categories:

Findspot and site assemblages are limited in the numbers and kinds of materials collected. Projectile points were the most prevalent lithic artifact recovered during survey and provides specific data for defining hunting or lithic manufacturing activities.

Site and Findspot Distribution:

A section by section plot of findspot and site frequencies for the reservoir area from the dam to the Appanoose / Lucas county line (Figure 46) shows two concentrations of findspots; one at the juncture of Jackson Branch and the south fork of the Chariton River and the other near the juncture of Buck Creek and the Chariton River. Although previously recorded sites were tested in the Buck creek area, no substantial collection of materials were made there.

Buck Creek findspots are primarily small lithic scatters. No projectile points or ceramics were recovered from Buck Creek findspots. Findspots in that area consist of less than 25 fragments of chipping debris, with few tools represented. Sites and findspots near the Jackson Branch, however, are among the largest surface collections recorded during the 1979 survey. Overall site density for the area near the juncture of both the north fork and the Chariton river and for area near the mouth of Jackson Branch are higher than for most of the main body of the reservoir suggesting a more intensive use of that area by prehistoric populations.

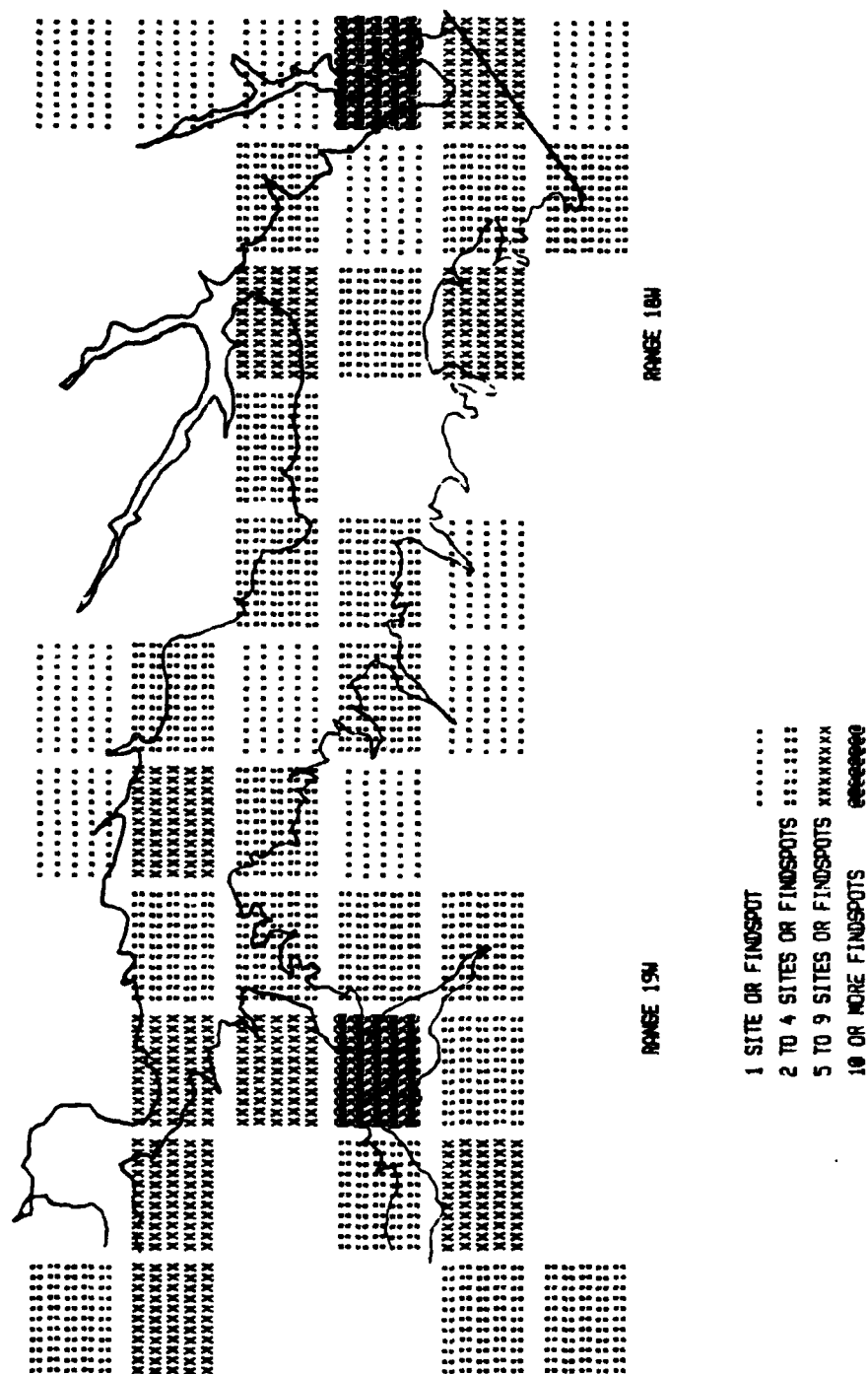


FIGURE 46. Density Gradients of Sites at Rathbun Reservoir

Plots of coordinates of findspots and sites recorded in 1979 indicate a pattern which may be expressed as a series of rules governing locational preference (Zimmerman 1977).

Larger occupations (13AN71 through 13AN78) are located in narrow valleys within less than 200 m of flowing water. A second preference seems to have been to choose locations near the juncture of two streams which provides access to the resources of two valleys. Access to environmental diversity as a factor in locational selection was proposed in the research design for the 1979 investigations as a major factor influencing site selection by hunters and gatherers. Not only are larger occupations located in narrow valleys near the juncture of streams, but the greatest site densities per section are also evident there.

Areas where occupation density is somewhat lower as that where Honey Creek Park is located, are where mortuary sites such as the mounds at 13AN1, 13AN207, and 13AN208 are located. Nearby findspots and sites are generally limited to small lithic scatters generally lacking in lithic tools. One exception is 13AN45 which is at least 1 km north of the Rosencrants mound group. Although extensive ceramic collections have been recovered from 13AN45, few lithic tools have been recovered there.

To investigate the relationship between classes of lithic tools and mound sites, it was decided to investigate the relationship between the locations of the most prevalent tool type, projectile points, and those of mortuary sites. A preliminary plot of sections where projectile points had been recovered and those where mounds are located was made in the same manner as that for findspot density. The distribution of sections where projectile points are found combined with plots of the sections containing 13AN1, 13AN207, and 13AN208 show a disjoint pattern.

No points were recovered from the sections where the mounds are located. Further, when collections made from nearby sites such as 13AN45 and 13AN44 are examined it is found that no projectile points were recovered from either in 1979 or during prior surveys (Weichman 1976b). Nearly every shoreline section surveyed produced findspots or sites with projectile points except those of the south shore of Honey Creek Park and that segment of the shoreline across the valley to the south (Figure 49). As a working hypothesis for future research it is proposed that cultural rather than ecological reasons are responsible for the absence of hunting equipment from the vicinity of the mounds and from the area where the bluffs were visible across the Chariton floodplain. If hunting was not regularly pursued within sight of the mounds or the bluff they occupied, then this pattern of avoidance would be expected to appear in the archaeological record as it indeed does. An examination of the materials recovered from mound sites in other parts of the reservoir area

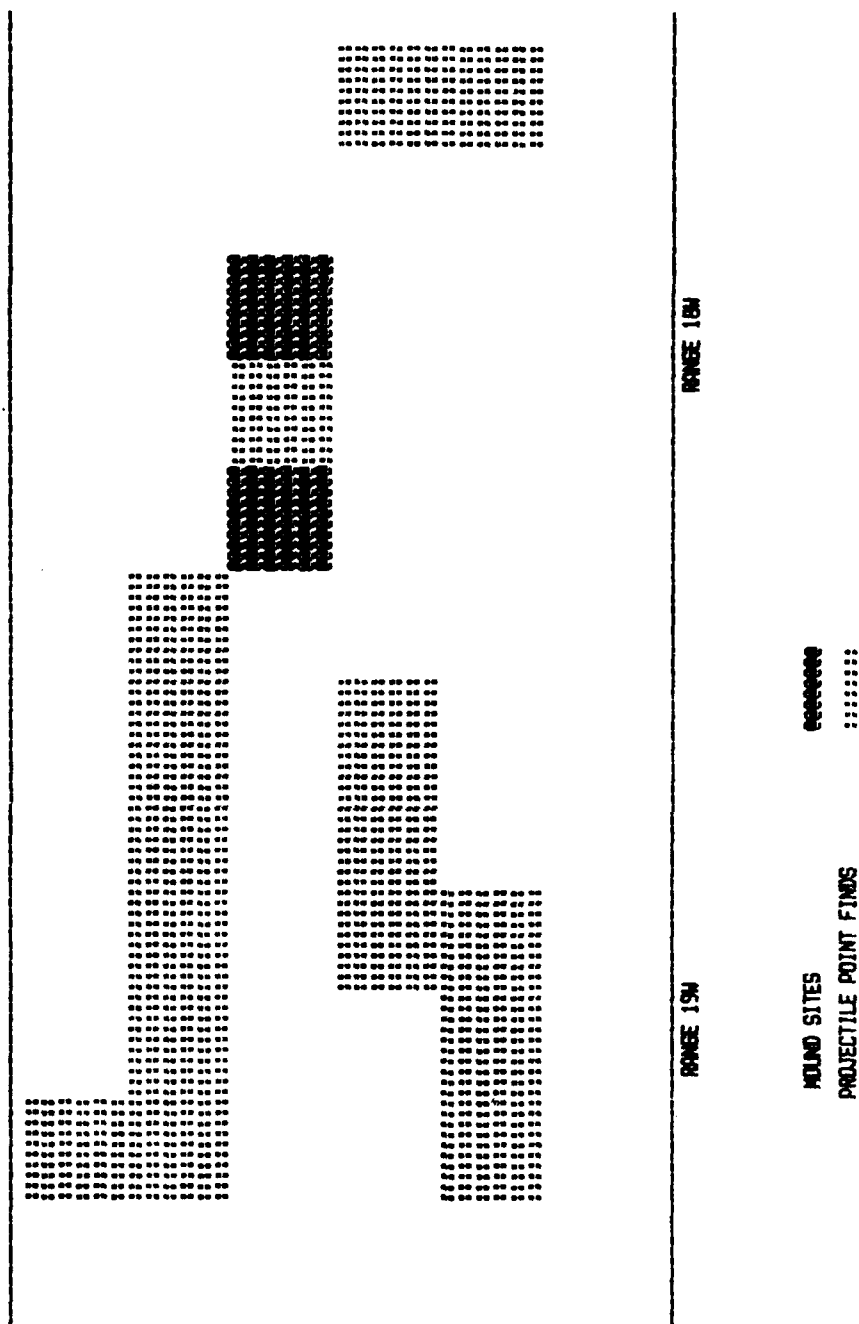


FIGURE 47. Projectile Point and Mortuary Site Distributions .

show a pattern of single projectile points from the fill or else their complete absence. Presently, however, there is too little data to support more than a suggestion of this pattern. In terms of the research design proposed for the shoreline data from Rathbun Reservoir the importance of non ecological elements such as those suggested by the distribution of projectile points, was not considered. Temporal control, however, is important for synchronic models of this type and the Rathbun materials do not easily lend themselves to temporal interpretation. Environmental diversity is seen as a key factor for the location of intensive hunting and gathering occupations (Tiffany and Abbot 1982; Gourley 1983) in Iowa. Causal factors are seen as being related to vegetation and faunal resources and are tied to the presence of specific soil types and topography. It is in the area between the branching of the north and south forks of the Chariton river where site densities are greatest that the most complex series of soils within a short distance of the river valley is found.

ASSEMBLAGE DEFINITION

ASSEMBLAGE DISTRIBUTIONS

Three assemblage types predicted by the model presented in the research design are:

1. Hunting assemblages consisting of projectile points and flakes.
2. Food preparation assemblages where ceramics are found
3. Butchering and processing assemblages which include scrapers and cutting tools. The model predicts that scrapers will occur with hide processing and clothing manufacturing assemblages, however, scrapers from the shoreline findspots are in all but one instance found in association with cutting tools.

Distribution of the three assemblage types are presented with assemblage size in Figures 48, 51, and 54. Locations are of the assemblages are presented for the north and south forks of the reservoir in Figures 50, 53, and 57 and for the main body of the reservoir in Figures 49, 52, and 56.

Hunting Assemblages:

Hunting assemblages were found at 26 locations on the shoreline margins. Only a single findspot or site in this category is an isolated find. All other hunting assemblages also include chipping debris. Many of the projectile points accompanied by chipping debris are broken specimens suggesting that lithic manufacturing or perhaps replacement took place at those locations. Some of the larger lithic scatters produced more points; 13AN71 has 6 projectile points.

Locations of hunting assemblages place them in areas where the river valley is narrow thus meeting the expectations of the model. Narrow valleys provide access to resource zones such as watering places, wooded bottomlands, and upland grasslands within a more restricted distance than is evident for the main valley of the Chariton River. In contrast, sites recorded for the main river valley where the river channel is separated from the valley edge by as much as two miles, hunting assemblages are absent.

Butchering and Processing Assemblages:

This category of assemblages includes scrapers, bifacial cutting tools, retouched flakes, and large bifaces. Scrapers are included in this category since in all but two instances, they are found accompanied by other lithic tools. Scrapers are

Class

1 item	(1)	8	0.96 %
2 - 10 items	(8)	00000000	7.69 %
11 - 25 items	(7)	00000000	6.73 %
26 - 50 items	(4)	0000	3.85 %
51 - 75 items	(1)	8	0.96 %
76 - 100 items	(0)		0.00 %
> 100 items	(14)	00000000000000	13.46 %

Number of Projectile Points

1 10 25 40

SITES OR FINDSPOTS = 26

SAMPLE SIZE = 35

MEAN = 1.35

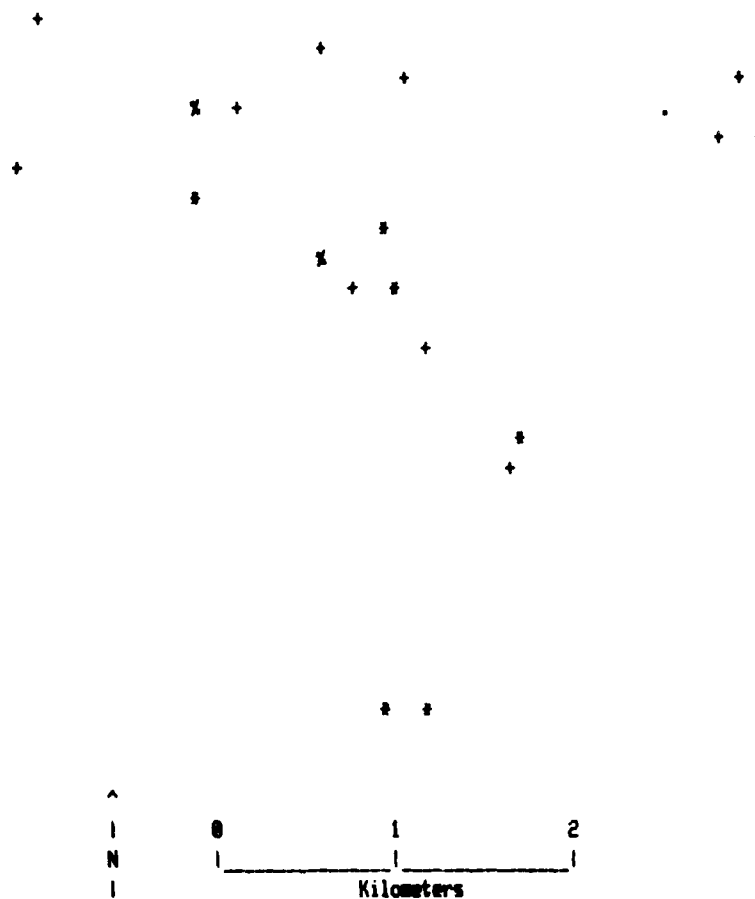
FIGURE 48. Distribution of Hunting Assemblage Findspots



SYMBOLS

- ISOLATED FINDSPOT
- + 1 TO 25 ARTIFACTS
- x 26 TO 100 ARTIFACTS
- * MORE THAN 100 ITEMS
- o PREVIOUSLY RECORDED SITE

FIGURE 49. Hunting Assemblage Location and Density - Range 18W .



SYMBOLS

- . ISOLATED FINDSPOT
- + 1 TO 25 ARTIFACTS
- x 25 TO 100 ARTIFACTS
- * MORE THAN 100 ITEMS
- o PREVIOUSLY RECORDED SITE

FIGURE 50. Hunting Assemblage Location and Density - Range 19W .

encountered in the smallest and largest assemblages, while cutting tools appear in the widest range of assemblage sizes. This most probably reflects the specialized nature of scraping tools and the more general utility of cutting tools which would be expected in both procurement and processing assemblages. The quantities of cutting tools in the Rathbun shoreline assemblages does not allow for this category to be subdivided into heavy choppers, light duty cutting tools, and retouched flakes. plots of each of the categories were attempted, but overlapped considerably.

Food Processing Assemblages:

Ceramics are the major evidence for food processing activities recovered from shoreline findspots. The distribution of assemblages in this category express a distinct pattern occurring either in locations where a few scattered flakes were found or else they are present in some of the larger assemblages. No ceramics are found in assemblages with between 25 and 100 artifacts including chippage suggesting that activity specialization may be responsible. It is possible that findspots with between 25 and 100 lithic artifacts are associated with non ceramic activities such as butchering and hunting. Archaic projectile points were recovered from the assemblages of the same size as were ceramics, suggesting that non ceramic findspots are not necessarily pre ceramic occupations.

Locations place food processing findspots and sites near the confluence of the north and south forks of the Chariton river and near the juncture of the Jackson Branch and the south fork of the Chariton. As indicated above, these areas are some of the most extensive in terms of environmental diversity within the Chariton drainage.

Hypothetical activities suggested by the shoreline findspot assemblages recovered from the margins of Rathbun reservoir are as follows. The narrow valleys of the two forks of the Chariton river and its tributaries provided prehistoric hunters access to watering places, wooded stream margins, and grasslands in the uplands within a restricted space. In contrast, access to the same series of resource zones in the wider parts of the Chariton river valley was spread over linear distances of up to three miles. Cultural factors, such as the avoidance of the river valley in areas adjacent to the Rosencrantz, Overturf, and Hawk mound groups by Woodland hunters are suggested by distributions of shoreline assemblages with projectile points present. The physiographic situation of the mounds in one of the widest parts of the river valley provides an alternative reason for the lack of projectile points in that area. Additional collections from the shoreline in the area near the mounds may provide evidence to either support or refute the suggestion of avoidance of the area near the mounds by Woodland hunters.

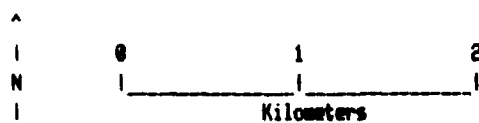
Class			
1 item	(0)	0.00 %	
2 - 10 items	(8)	88888888	7.69 %
11 - 25 items	(3)	888	2.88 %
26 - 50 items	(0)	0.00 %	
51 - 75 items	(0)	0.00 %	
76 - 100 items	(0)	0.00 %	
> 100 items	(21)	888888888888888888888888	20.19 %
Number of Sherds			
	1	10	25
			40

SITES OR FINDSPOTS = 9

SAMPLE SIZE = 32

MEAN = 3.56

FIGURE 51. Distribution of Food Preparation Sites and Findspots



SYMBOLS

- . ISOLATED FINDSPOT
- + 1 TO 25 ARTIFACTS
- x 26 TO 100 ARTIFACTS
- * MORE THAN 100 ITEMS
- o PREVIOUSLY RECORDED SITE

FIGURE 52. Food Preparation Assemblage Location and Density -R. 18W



SYMBOLS

- ISOLATED FINDSPOT
- + 1 TO 25 ARTIFACTS
- × 26 TO 100 ARTIFACTS
- * MORE THAN 100 ITEMS
- o PREVIOUSLY RECORDED SITE

FIGURE 53. Food Preparation Assemblage Location and Density -R. 19W

Game animals were probably processed near where they were taken, since cutting and scraping implements appear in the same areas as hunting equipment. Gathered materials and processed game were probably returned to the main encampment near the juncture of major streams; it is these areas that provided access to greater variety in resources within a short distance.

EVALUATION OF THE RESEARCH DESIGN

The expectations of the research design for the Rathbun reservoir shoreline, public use area, and previously recorded sites were met in some instances and were not in others. Where conditions required quantities of data the model could not be applied. There was little data for any single class of lithic tools. Where more than twenty or thirty tools were collected, many of them were incomplete and unusable since they were broken. Ceramics samples generally lacked rim sherds. Body sherds were crumbly and small.

The establishment of a chronology based on materials recovered from the 31 tested sites failed since many of the sites either had not been visited by the individuals reporting them, or they were thin scatters with no depth. Diagnostic materials collected from shoreline findspots were limited to 4 projectile points and collections of ceramics from eight findspots and sites. In order to use the model of assemblage types presented in the research design, it was necessary to deal with the data in less temporally specific terms and to try to make statements concerning hunters and gatherers in general.

Assemblage types defined at shoreline findspots can be investigated further when larger collections are available. The collections of materials from 13AN52 (Benn and Hovde 1979) and other previously recorded sites may provide a quantitatively adequate data base to verify assemblage types statistically.

Class			
1 item	(4)	0000	3.85 %
2 - 10 items	(6)	000000	5.77 %
11 - 25 items	(8)	00000000	7.69 %
26 - 50 items	(3)	000	2.88 %
51 - 75 items	(2)	00	1.92 %
76 - 100 items	(2)	00	1.92 %
> 100 items	(10)	0000000000	9.62 %
Number of Tools			
	1	10	25
			40

SITES OR FINDSPOTS = 28

SAMPLE SIZE = 35

MEAN = 1.25

FIGURE 54. Distribution of Findspots and Sites with Cutting Tools

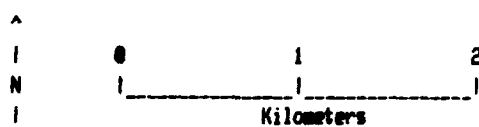
Class			
1 item	(0)		0.00 %
2 - 10 items	(1)	0	0.96 %
11 - 25 items	(3)	000	2.88 %
26 - 50 items	(0)		0.00 %
51 - 75 items	(0)		0.00 %
76 - 100 items	(0)		0.00 %
> 100 items	(5)	00000	4.81 %
Number of Scraping Tools			
	1	10	25
			40

SITES OR FINDSPOTS = 6

SAMPLE SIZE = 9

MEAN = 1.50

FIGURE 55. Distribution of Findspots and Sites with Scraping Tools



SYMBOLS

- ISOLATED FINDSPOT
- + 1 TO 25 ARTIFACTS
- x 26 TO 100 ARTIFACTS
- * MORE THAN 100 ITEMS
- o PREVIOUSLY RECORDED SITE

FIGURE 56. Butchering Assemblage Location and Density - Range 18W

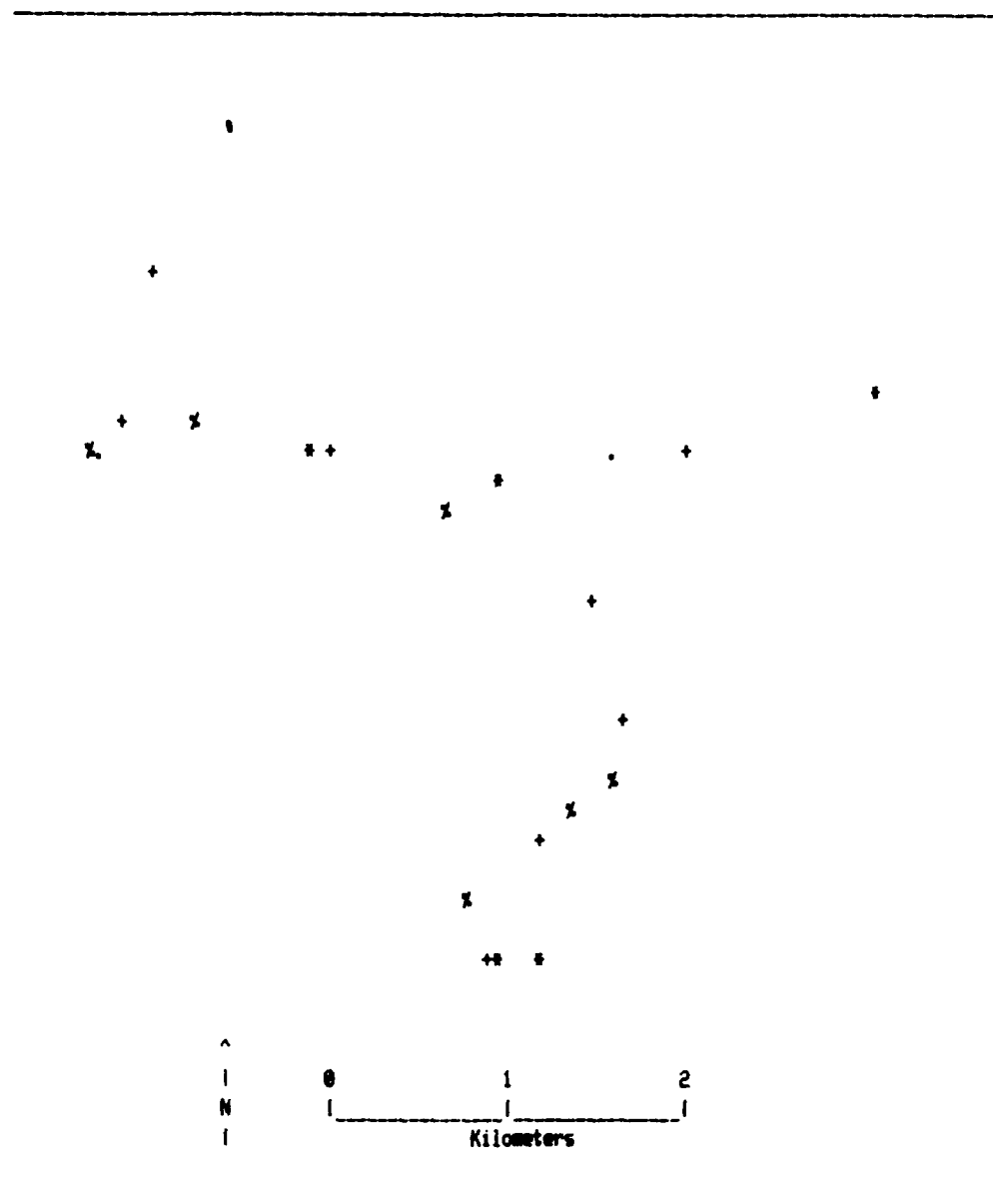


FIGURE 57. Butchering Assemblage Location and Density - Range 19W

GLOSSARY OF TERMS

Typological categories have a long history as useful tools for the prehistoric archeologist in that they assist in clarifying description and interpretation by reducing the numbers of classes with which one has to deal.

CHIPPED STONE ARTIFACTS:

Artifacts in this category are produced as both end products and by-products of lithic reduction processes utilized during the manufacture of lithic tools. In interpretive terms, it is the finished artifacts, and rarely the by-products, which are most useful for identifying or assigning the cultural historical position of an assemblage. Some materials are more useful than others for defining archeological cultures. Flakes produced during all initial stages of the lithic reduction process vary little from culture to culture unless specific techniques of detachment are utilized. Projectile point forms, however, are often unique and serve as a means of assigning an assemblage to a specific period. Listed below are categories applicable to the materials collected during survey and testing of archeological sites and findspots in the Rathbun Reservoir area.

Flakes This category of prehistoric artifacts includes fragments of chert, flint or other raw material which have been detached from a parent mass of raw material by the application of either percussion or pressure exerted by the prehistoric knapper. Flakes share a common set of attributes which, when any one is present, distinguish items of human manufacture from those which are found to occur naturally. These characteristics are: 1) a bulb of percussion, 2) compression rings, and 3) striking platforms. Initial flakes struck from a core will retain a portion of the cortex or original matrix from which the material was quarried.

Retouched Flakes Flakes in this category have been modified by the removal of small flakes along a part or along all of their margins. This category of materials is difficult to identify with certainty since damage caused by natural agencies can produce edge configurations which resemble those produced by humans. Functions of retouched blades would have been restricted to light-duty cutting

implements.

Chunks

Like flakes, this category may represent the initial phases of lithic manufacturing processes and, for that reason, are nearly useless for assigning cultural affiliation to assemblages. Chunks or shatter generally are angular broken fragments of chert, flint, or other raw material which fail to exhibit characteristics of flakes such as the presence of a striking platform or a bulb of percussion. Chunks are not good indicators of human activities because they may have been formed as a result of natural agencies rather than those attributable to humans.

Cores

Items in this category of artifacts generally exhibit at least one striking platform and have flake scars along their margins. Flake scars often have some form of systematic alignment. Cores are masses of raw material from which flakes have been systematically removed.

Projectile Points

Projectile points are either triangular, lanceolate, or ovoid in outline and have a pointed tip and a hafting element. Tools in this category are made from flakes or from larger masses of material which have been reduced and shaped by the removal of flakes from their margins. Since reductive shaping is used to produce these artifacts, forms can consist of a wide variety of shapes and sizes. Projectile point forms are useful for identifying cultural historical units or for defining the temporal position of an assemblage. Projectile points functioned as spear, dart, or arrow points or as cutting tools.

Endscrapers

Endscrapers generally have at least one rounded working edge and have a plano-convex cross section. Scraper forms vary from flat specimens made from small flakes to larger specimens which were formed from large flakes or which were made as core tools. Scrapers probably functioned as hide and woodworking tools.

GROUND STONE ARTIFACTS:

Axes

Ground stone axes are usually formed from igneous raw materials such as diorite which are pecked into a rough form then are smoothed and ground to their final form. Axes generally are grooved

between the poll and bit end; the latter is a transverse working edge. Celts are axes lacking grooves. Axes and celts could function as woodworking tools or as tools which require extensive mass for smashing and pounding.

Ground Hematite Small pieces of hematite on which one or more facets have been abraded as a consequence of pigment manufacture appear in many other areas of the Plains as well as at Rathbun Lake. Striations on the ground surfaces and the reddish color of the ground material support the conclusion of these artifacts functioning as a source of pigment. Tools, however, are found which have been manufactured of hematite.

LOCATIONAL TERMS

Findspot Locations where artifacts were recovered around the shoreline of Rathbun Reservoir were termed 'findspots' since many of them consisted of very few fragments of chippage (flakes) or lacked tools altogether. Since all materials on the beaches were collected, it is not certain if any of the findspots still exist. Another factor involved in the decision not to assign State of Iowa site numbers to each of the findspots is that of erosion by wave action. Some of the areas where materials were collected no longer exist due to recent high water levels in the reservoir and accompanying wave action.

Site For the purposes of this study, a site is a place where artifacts are found which either is not located along the shoreline or which has produced artifacts in quantities greater than 100 items including chippage.

Strand Line Along the beaches at Rathbun reservoir the surveyers frequently encountered thin lines of recent organic debris which had been 'stranded' along the shore by unusually large waves. Materials in the strand line were generally at an elevation high enough above the lake level to protect them from normal wave action. In several instances, prehistoric artifacts were found in strand lines mixed with styrofoam fragments and other modern debris.

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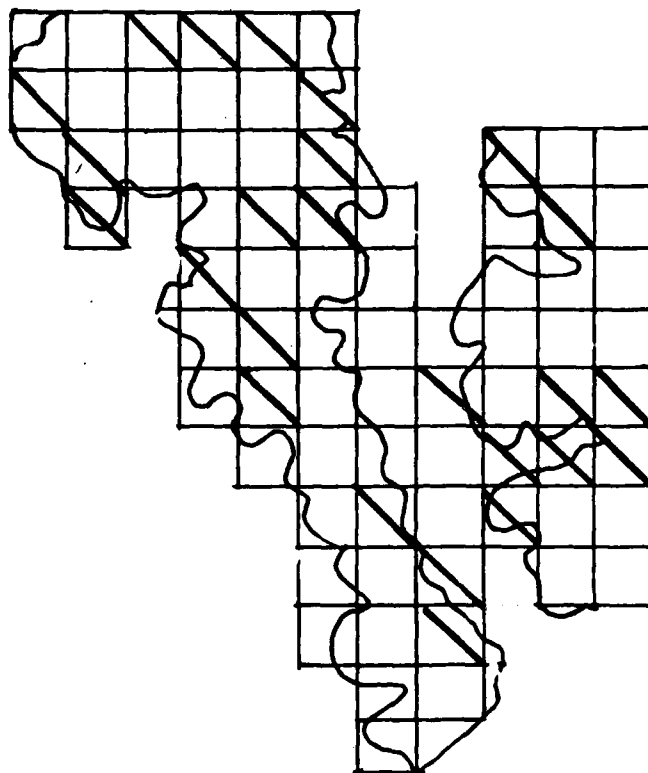
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APPENDIX A
MAPS OF PUBLIC USE AREA SAMPLING

blocks are 200 m square
hatch indicates surveyed block

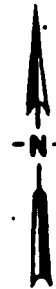
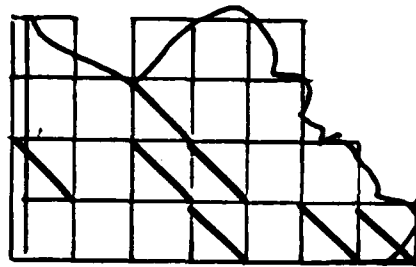


BUCK CREEK AREA

Number of Units = 75

Sample = 25

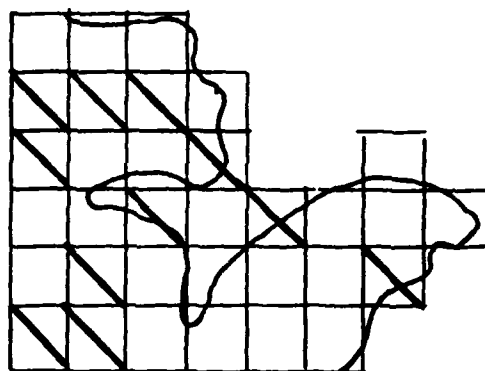
blocks are 200 m square
hatch indicates surveyed block



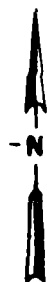
GLENWOOD AREA

Number of Units = 22

Sample = 7



blocks are 200 m square
hatch indicates surveyed block

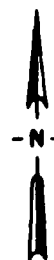
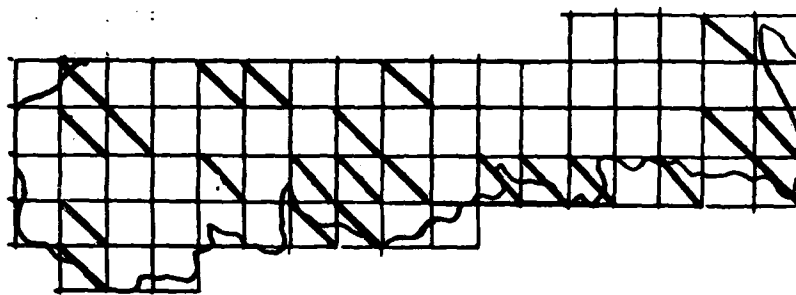


ROLLING COVE AREA

Number of Units = 33

Sample = 11

blocks are 200 m square
hatch indicates surveyed block



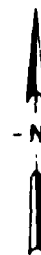
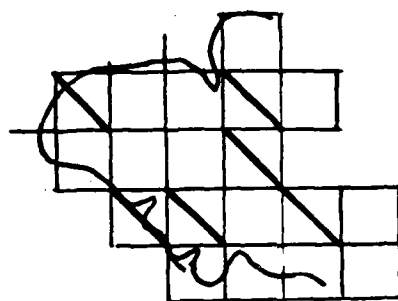
BRIDGEVIEW AREA

Number of Units = 70

Sample = 23

blocks are 200 m square

hatch indicates surveyed block



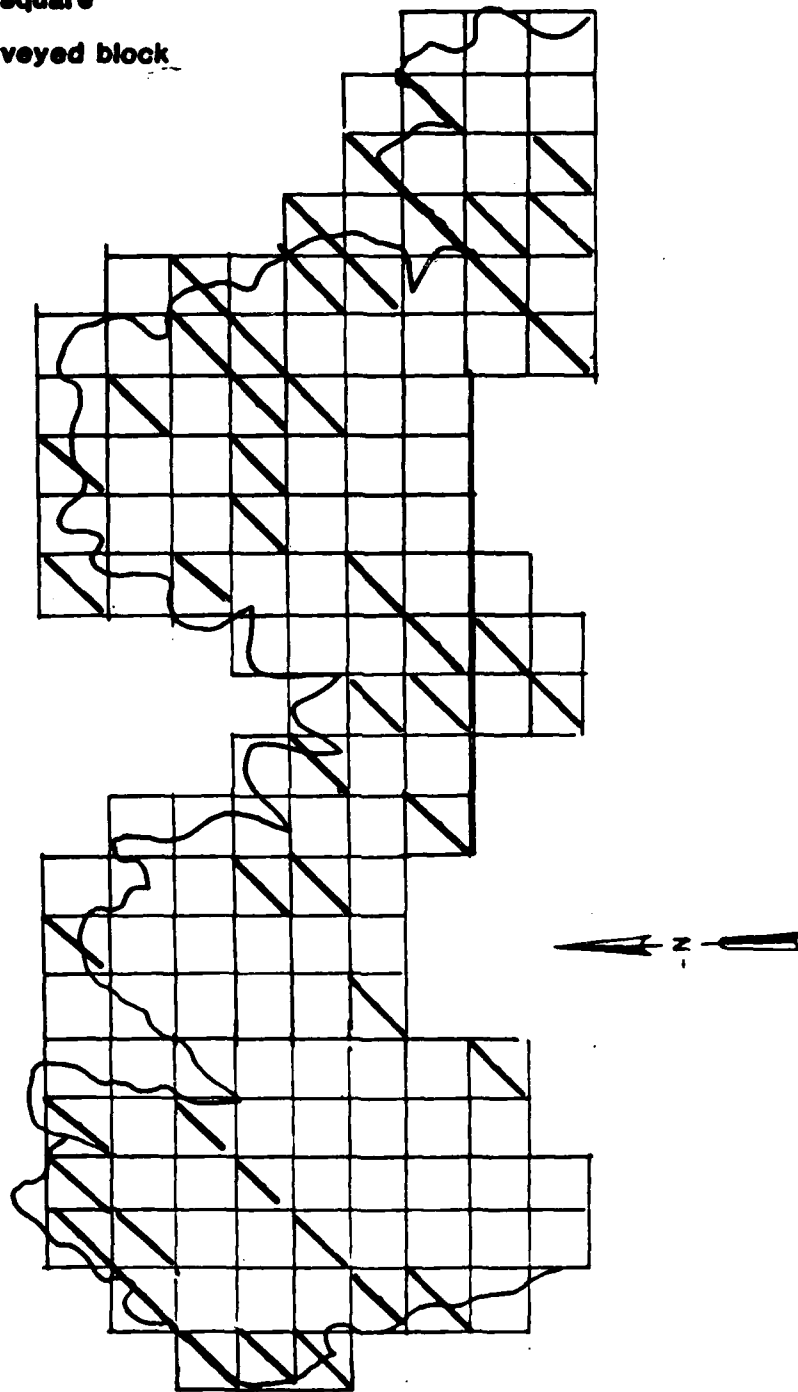
SOUTH FORK AREA

Number of Units = 19

Sample = 6

blocks are 200 m square

hatch indicates surveyed block



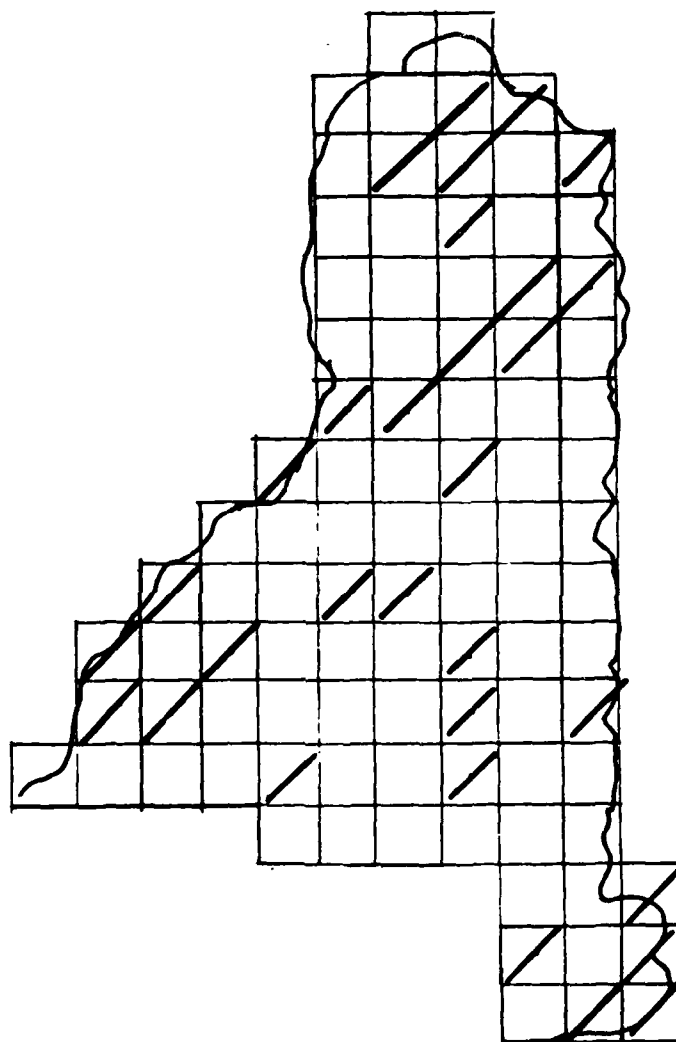
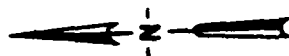
ISLAND VIEW AREA

Number of Units = 145

Sample = 48

blocks are 200 m square

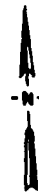
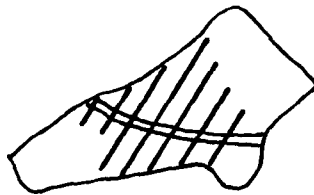
hatch indicates surveyed block



HONEY CREEK STATE PARK

Number of Units = 95

Sample = 31



0 600
meters

OUTLET AREA (hatched area surveyed)